

*In the Matter of*

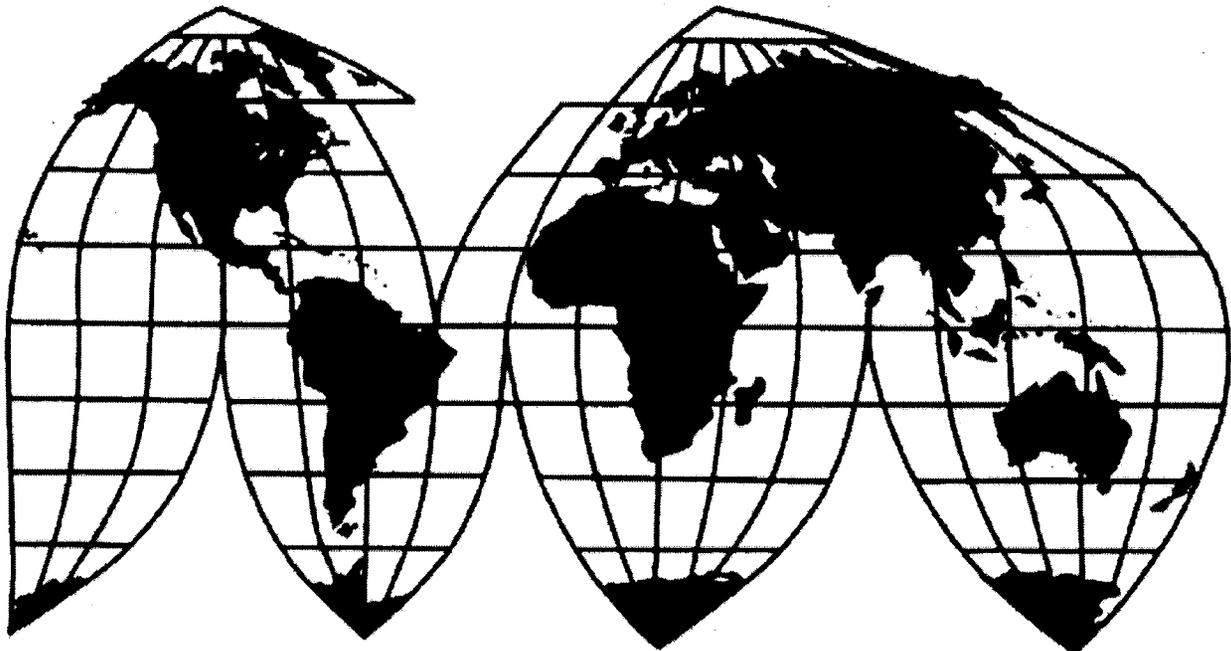
**CERTAIN DEVICES FOR IMPROVING  
UNIFORMITY USED IN A BACKLIGHT  
MODULE AND COMPONENTS  
THEREOF AND PRODUCTS**

337-TA-805

Publication 4548

July 2015

**U.S. International Trade Commission**



Washington, DC 20436

# **U.S. International Trade Commission**

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Washington, DC 20436**

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## **CERTAIN DEVICES FOR IMPROVING UNIFORMITY USED IN A BACKLIGHT MODULE AND COMPONENTS THEREOF AND PRODUCTS**

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**UNITED STATES INTERNATIONAL TRADE COMMISSION  
Washington, D.C.**

**In the Matter of**

**CERTAIN DEVICES FOR IMPROVING  
UNIFORMITY USED IN A BACKLIGHT  
MODULE AND COMPONENTS  
THEREOF AND PRODUCTS  
CONTAINING SAME**

**Investigation No. 337-TA-805**

**NOTICE OF COMMISSION DECISION TO REVIEW IN PART A FINAL INITIAL  
DETERMINATION ON REMAND FINDING NO VIOLATION OF SECTION 337 AND  
ON REVIEW TO AFFIRM WITH MODIFICATION; TERMINATION OF  
INVESTIGATION WITH A FINDING OF NO VIOLATION**

**AGENCY:** U.S. International Trade Commission.

**ACTION:** Notice.

**SUMMARY:** Notice is hereby given that the U.S. International Trade Commission has determined to review-in-part the presiding administrative law judge's ("ALJ") final initial determination on remand ("Remand ID") issued on February 28, 2013, finding no violation of section 337 of the Tariff Act of 1930, (as amended), 19 U.S.C. § 1337 ("section 337"), in the above-captioned investigation, and on review, to affirm the Remand ID's finding of no violation of section 337 with modification. The investigation is terminated.

**FOR FURTHER INFORMATION CONTACT:** Megan M. Valentine, Office of the General Counsel, U.S. International Trade Commission, 500 E Street, S.W., Washington, D.C. 20436, telephone (202) 708-2301. Copies of non-confidential documents filed in connection with this investigation are or will be available for inspection during official business hours (8:45 a.m. to 5:15 p.m.) in the Office of the Secretary, U.S. International Trade Commission, 500 E Street, S.W., Washington, D.C. 20436, telephone (202) 205-2000. General information concerning the Commission may also be obtained by accessing its Internet server at <http://www.usitc.gov>. The public record for this investigation may be viewed on the Commission's electronic docket (EDIS) at <http://edis.usitc.gov>. Hearing-impaired persons are advised that information on this matter can be obtained by contacting the Commission's TDD terminal on (202) 205-1810.

**SUPPLEMENTARY INFORMATION:** The Commission instituted this investigation on September 14, 2011, based on a complaint filed by Industrial Technology Research Institute of Hsinchu, Taiwan and ITRI International Inc. of San Jose, California (collectively "ITRI"). 76 *Fed. Reg.* 56796-97 (Sept. 14, 2011). The complaint alleges violations of section 337 in the importation into the United States, the sale for importation, and the sale within the United States

after importation of certain devices for improving uniformity used in a backlight module and components thereof and products containing same by reason of infringement of certain claims of U.S. Patent No. 6,883,932 (“the ‘932 patent”). The complaint further alleges the existence of a domestic industry. The Commission’s notice of investigation named as respondents LG Corporation of Seoul, Republic of Korea; LG Electronics, Inc. of Seoul, Republic of Korea; and LG Electronics, U.S.A., Inc. of Englewood Cliffs, New Jersey. The Office of Unfair Import Investigations was named as a participating party. The complaint was later amended to add respondents LG Display Co., Ltd. of Seoul, Republic of Korea and LG Display America, Inc. of San Jose, California to the investigation. Notice (Feb. 2, 2012); Order No. 11 (Jan. 19, 2012). The Commission later terminated LG Corporation from the investigation. Notice (July 13, 2012); Order No. 18 (June 22, 2012).

On October 22, 2012, the ALJ issued his final initial determination (“Final ID”), finding no violation of section 337 as to the ‘932 patent. The ID included the ALJ’s recommended determination (“RD”) on remedy and bonding. In particular, the ALJ found that claims 6, 9 and 10 of the ‘932 patent are not infringed literally or under the Doctrine of Equivalents by the accused products under his construction of the claim limitation “structured arc sheet” found in claim 6. The ALJ also found that ITRI’s domestic industry product does not satisfy the technical prong of the domestic industry requirement. The ALJ did find, however, that ITRI has satisfied the economic prong of the domestic industry requirement under 19 U.S.C. § 1337(a)(3)(A) and (B). Because he found no infringement and no domestic industry, the ALJ did not reach the issues of patent validity or enforceability. In the event the Commission found a violation of section 337, the ALJ recommended that the appropriate remedy is a limited exclusion order barring entry of LG’s infringing products. The ALJ also recommended issuance of cease and desist orders against LG Electronics USA and LG Display America. The ALJ further recommended that LG be required to post a bond of one percent of the entered value of each infringing product during the period of Presidential review.

On November 5, 2012, ITRI filed a petition for review of certain aspects of the Final ID. Also on November 5, 2012, participating respondents LG Electronics, Inc., LG Electronics U.S.A., Inc., LG Display Co., Ltd., and LG Display America, Inc. (collectively “LG”) filed a contingent petition for review of certain aspects of the ID. No post-RD statements on the public interest pursuant to Commission Rule 210.50(a)(4) or in response to the post-RD Commission Notice issued on October 24, 2012, were filed. *See 77 Fed. Reg. 65579* (Oct. 29, 2012).

On December 21, 2012, the Commission determined to review the Final ID in its entirety and to remand-in-part to the ALJ to consider the issues of invalidity and patent unenforceability. *77 Fed. Reg. 77092-7093* (Dec. 31, 2012). On January 29, 2013, the Commission determined not to review an ID (Order No. 22) extending the target date for completion of the investigation by four months to June 28, 2013. *See Notice* (Jan. 29, 2013); Order No. 22 (Jan. 9, 2013).

On February 28, 2013, the ALJ issued his Remand ID, finding no violation of section 337. In particular, the ALJ found that the asserted claims of the ‘932 patent are invalid as anticipated under 35 U.S.C. § 102. He further found that the asserted claims of the ‘932 patent are not invalid as obvious under 35 U.S.C. § 103. The ALJ also found that the asserted claims of the

'932 patent are not invalid for failure to satisfy the written description requirement under 35 U.S.C. § 112, or for failure to satisfy the definiteness requirement under 35 U.S.C. § 112. He further found that the asserted claims are not unenforceable due to inequitable conduct before the U.S. Patent and Trademark Office.

On March 13, 2013, ITRI filed a petition for review of the Remand ID's finding that U.S. Patent Application Publication No. 2003/0107892 to Yao ("Yao '892") anticipates the asserted claims of the '932 patent. Also on March 13, 2013, LG filed a contingent petition for review of the Remand ID's finding that U.S. Patent No. 5,101,331 to Katoh ("Katoh '331") does not anticipate asserted claims 6 and 10 of the '932 patent. LG also argues that the Remand ID errs in finding that Japanese Patent Publication 2000-338895 to Azuma ("Azuma '895") does not anticipate claim 6 of the '932 patent. LG further argues that the Remand ID errs in not finding that the asserted claims of the '932 patent are obvious in light of various combinations of prior art references. On March 21, 2013, ITRI filed a response to LG's contingent petition for review. *See* ITRI's Remand Resp. Also on March 21, 2013, LG filed a response to ITRI's petition for review. *See* LG's Remand Resp. Further on March 21, 2013, the Commission investigative attorney filed a combined response to ITRI's and LG's petitions. *See* IA's Remand Resp.

Having examined the record of this investigation, including the ALJ's Final ID, the petitions for review, and the responses thereto, the Commission has determined to review the Remand ID in part. In particular, the Commission has determined to review the Remand ID's finding that Yao '892 anticipates claims 6, 9, and 10 of the '932 patent, and on review, finds that Yao '892 anticipates the asserted claims based on modified reasoning. The Commission has also determined to review the Remand ID's finding that LG has not shown by clear and convincing evidence that Katoh '331 does not anticipate claims 6 and 10 of the '932 patent, and on review, finds that Katoh '331 does not anticipate the asserted claims based on modified reasoning. The Commission has determined not to review the remaining issues decided in the Remand ID.

With respect to other issues the Commission determined to review in the Final ID, the Commission affirms the Final ID's construction of the limitation "structured arc sheet" of claim 6 of the '932 patent. The Commission also finds that the accused products do not infringe the asserted claims of the '932 patent based on slightly modified reasoning. The Commission further finds that ITRI has failed to satisfy the technical prong of the domestic industry requirement based on slightly modified reasoning. The Commission affirms the Final ID's finding that ITRI has satisfied the economic prong of the domestic industry requirement.

The investigation is terminated. A Commission opinion will issue shortly.

The authority for the Commission's determination is contained in section 337 of the Tariff Act of 1930, as amended (19 U.S.C. § 1337), and in sections 210.42-46 and 210.50 of the Commission's Rules of Practice and Procedure (19 C.F.R. § 210.42-46 and 210.50).

By order of the Commission.

A handwritten signature in black ink, appearing to read 'Lisa R. Barton', written in a cursive style.

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Lisa R. Barton  
Acting Secretary to the Commission

Issued: April 29, 2013

**PUBLIC CERTIFICATE OF SERVICE**

I, Lisa R. Barton, hereby certify that the attached **NOTICE** has been served by hand upon the Commission Investigative Attorney, Vu Q. Bui, Esq., and the following parties as indicated on **April 29, 2013**.



Lisa R. Barton, Acting Secretary  
U.S. International Trade Commission  
500 E Street, SW, Room 112  
Washington, DC 20436

**On Behalf of Complainants Industrial Technology Research  
Institute and ITRI International Inc.:**

Tom M. Schaumberg, Esq.  
**ADDUCI, MASTRIANI & SCHAUMBERG LLP**  
1133 Connecticut Avenue, 12<sup>th</sup> Floor  
Washington, DC 20036

( ) Via Hand Delivery  
( ) Via Overnight Delivery  
(  ) Via First Class Mail  
( ) Other: \_\_\_\_\_

**On Behalf of Respondents LG Electronics, Inc., LG  
Electronics U.S.A., Inc., LG Display Co., Ltd. and LG Display  
America, Inc.:**

Charles F. Schill, Esq.  
**STEPTOE & JOHNSON LLP**  
1330 Connecticut Avenue, NW  
Washington, DC 20036

( ) Via Hand Delivery  
( ) Via Overnight Delivery  
(  ) Via First Class Mail  
( ) Other: \_\_\_\_\_

UNITED STATES INTERNATIONAL TRADE COMMISSION  
Washington, D.C.

PUBLIC VERSION

**In the Matter of**

**CERTAIN DEVICES FOR IMPROVING  
UNIFORMITY USED IN A BACKLIGHT  
MODULE AND COMPONENTS  
THEREOF AND PRODUCTS  
CONTAINING SAME**

**Investigation No. 337-TA-805**

**COMMISSION OPINION**

**I. BACKGROUND**

**A. Procedural History**

The Commission instituted this investigation on September 14, 2011, based on a complaint filed by Industrial Technology Research Institute of Hsinchu, Taiwan and ITRI International Inc. of San Jose, California (collectively “ITRI”). 76 *Fed. Reg.* 56796-97 (Sept. 14, 2011). The complaint alleges violations of section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337 (“section 337”), in the importation into the United States, the sale for importation, and the sale within the United States after importation of certain devices for improving uniformity used in a backlight module and components thereof and products containing same by reason of infringement of certain claims of U.S. Patent No. 6,883,932 (“the ‘932 patent”). The complaint further alleges the existence of a domestic industry. The Commission’s notice of investigation named as respondents LG Corporation of Seoul, Republic of Korea; LG Electronics, Inc. of Seoul, Republic of Korea; and LG Electronics, U.S.A., Inc. of Englewood Cliffs, New Jersey. The Office of Unfair Import Investigations was named as a participating party. The Complaint was later amended to add respondents LG Display Co., Ltd. of Seoul, Republic of Korea and LG Display America, Inc. of San Joe, California to the investigation.

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Notice (Feb. 2, 2012); Order No. 11 (Jan. 19, 2012). The Commission later terminated LG Corporation from the investigation. Notice (July 13, 2012); Order No. 18 (June 22, 2012).<sup>1</sup>

On October 22, 2012, the presiding administrative law judge (“ALJ”) issued his final initial determination (“Final ID”), finding no violation of section 337 as to the ‘932 patent. In particular, the ALJ found that claims 6, 9 and 10 of the ‘932 patent are not infringed literally or under the doctrine of equivalents (“DOE”) by the accused products under his construction of the claim limitation “structured arc sheet” found in claim 6. The ALJ also found that ITRI’s domestic industry product does not satisfy the technical prong of the domestic industry requirement. The ALJ did find, however, that ITRI has satisfied the economic prong of the domestic industry requirement under 19 U.S.C. § 1337(a)(3)(A) and (B). Because he found no infringement and no domestic industry, the ALJ declined to conduct a validity or unenforceability analysis even though these issues were litigated. The Final ID also included the ALJ’s recommended determination (“RD”) on remedy and bonding.

On November 5, 2012, ITRI filed a petition for review of certain aspects of the Final ID. In particular, ITRI requested that the Commission review the ID’s construction of the limitation “structured arc sheet” in claim 6 of the ‘932 patent. ITRI also requested review of the Final ID’s finding, resulting from the ALJ’s construction of the claim limitation “structured arc sheet,” that the accused products do not infringe the asserted claims of the ‘932 patent literally or under DOE. ITRI further requested that the Commission review the Final ID’s finding, also stemming from the adopted construction of the limitation “structured arc sheet,” that the domestic industry

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<sup>1</sup> Hereinafter, participating respondents LG Electronics, Inc., LG Electronics U.S.A., Inc., LG Display Co., Ltd., and LG Display America, Inc. will be referred to collectively as “LG.”

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products do not practice the asserted claims of the '932 patent. Lastly, ITRI argued that, although the ALJ found that it satisfied the economic prong of the domestic industry requirement, the ALJ erred by not including in his analysis the investments of ITRI's licensees made before the execution of the licensee agreement between ITRI and its licensee.

Also on November 5, 2012, LG contingently petitioned for review of the ALJ's decision not to rule on the issues of validity and patent unenforceability presented in the case. In particular, LG argued that the ALJ erred by not determining whether the asserted claims of the '932 patent are invalid as anticipated under either the ID's adopted claim construction or under ITRI's proposed claim construction of the limitation "structured arc sheet" of claim 6. LG further asserted that the ALJ erred by not determining whether the asserted claims are obvious in view of combinations of twelve prior art references cited by LG. LG also argued that the ALJ erred by not determining whether the asserted claims of the '932 patent are invalid for lack of written description and/or indefiniteness. Finally, LG argued that the ALJ erred by not determining whether the '932 patent is unenforceable due to inequitable conduct before the U.S. Patent and Trademark Office ("USPTO").

On December 21, 2012, the Commission determined to review the Final ID in its entirety and to remand-in-part to the ALJ to consider the issues of invalidity and patent unenforceability. *77 Fed. Reg.* 77092 (Dec. 31, 2012).<sup>2</sup> On January 29, 2013, the Commission determined not to review an ID (Order No. 22) extending the target date for completion of the investigation by four

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<sup>2</sup> In its Notice of Review, the Commission stated that "[t]he ALJ should have resolved these issues given the procedural posture of this investigation (*i.e.*, post-hearing), and the absence of an extraordinary fact situation that would weigh heavily against resolving these material issues presented in the record." *77 Fed. Reg.* at 77093.

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months to June 28, 2013.

On February 28, 2013, the ALJ issued his Final ID on remand (“Remand ID”), finding no violation of section 337. In particular, the ALJ found that the asserted claims of the ‘932 patent are invalid as anticipated under 35 U.S.C. § 102. He further found that the asserted claims of the ‘932 patent are not invalid as obvious under 35 U.S.C. § 103. The ALJ also found that the asserted claims of the ‘932 patent are not invalid for failure to satisfy the written description requirement under 35 U.S.C. § 112, or for failure to satisfy the definiteness requirement under 35 U.S.C. § 112. He further found that the asserted claims are not unenforceable due to inequitable conduct before the USPTO.

On March 13, 2013, ITRI filed a petition for review of certain aspects of the Remand ID. In particular, ITRI requested that the Commission review the Remand ID’s finding that U.S. Patent Application Publication No. 2003/0107892 to Yao (“Yao ‘892”) anticipates the asserted claims of the ‘932 patent. Also on March 13, 2013, LG filed a contingent petition for review of certain aspects of the Remand ID. *See* LG’s Remand Pet. In particular, LG argued that the Remand ID errs in finding that U.S. Patent No. 5,101,331 to Katoh (“Katoh ‘331”) does not anticipate asserted claims 6 and 10 of the ‘932 patent. LG also argued that the Remand ID errs in finding that Japanese Patent Publication 2000-338895 to Azuma (“Azuma ‘895”) does not anticipate claim 6 of the ‘932 patent. LG further argued that the Remand ID errs in not finding that the asserted claims of the ‘932 patent are obvious in light of various combinations of prior art references. On March 21, 2013, ITRI and LG filed responses to each other’s petitions for review. Also on March 21, 2013, the Commission investigative attorney (“IA”) filed a combined response to ITRI’s and LG’s petitions.

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### **B. Patent at Issue**

The '932 patent is entitled "Apparatus for Improving Uniformity Used in a Backlight Module," and is directed to an apparatus that provides improved illumination uniformity in a backlight module, in particular, for a liquid crystal display or a liquid crystal TV. In backlight lighting modules, in particular the types of units that employ a "directly-under-light" or "bottom light" arrangement, where the light sources are located under the display area, the profile of the light sources tend to cause a non-uniformity of brightness, shadows, or line defects to the displayed image. To solve this problem, the '932 patent discloses the use of at least one structured arc sheet located at the periphery of the light source for making the illuminating light uniform. Independent claim 6 recites an apparatus for use in a backlight module comprising two structured arc sheets mounted at the periphery of the light source, where the two structured arc sheets have different thickness or curvature. Claim 9 of the '932 patent, which depends from claim 6, further recites that the apparatus is used in a liquid crystal display. Claim 10, which also depends from claim 6, further recites that the two structured arc sheets of the apparatus are not in the same plane.

The inventors of the '932 patent are I-Kai Pan, Po-Hung Yau, Yu-Nan Pao, and Chi-Feng Chen. The patent is assigned to ITRI. The '932 patent has 10 claims, of which claims 6, 9, and 10 are asserted against LG.

### **C. Products at Issue**

ITRI accuses the following LG televisions and monitor models of infringing claims 6, 9, and 10 of the '932 patent: Model Nos. 26LV2500, 37LV3500, 42LK520, 47LV3700, 42LV5500, 65LW6500, 32LV2500, 42LV5400, 42LV3500, 47LV5400, 47LW5700, 55LV5400, 55LW6500,

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22LV2500, 32LK330, 42LD452B, 47LK520, 55LV4400, N1910LZ-BF, L2000CP, W2246PM, E2340V, E2411PU, E1910T-BN, LD4200TM, 55LW5300, 47LK451C, 47LD452C, 22LD350, 22LH200C, 47LE5500, 47LE8500, 47LX6500, 47LX9500, 55LV3700, 55LV5500, and IPS231B-BN (collectively “the Accused Products”). Final ID at 8.

### **D. Asserted Domestic Industry Products**

ITRI relies on the products of its licensee, Samsung, to meet the domestic industry requirement. Specifically, ITRI relies on the following Samsung televisions: LN26B360, LN26B460, LN32D450, LN40A630MIF, LN40B500, LN52B550, LN55C630KIF, UN40C6300, UN40D6000SF, UN46B8000, UN46D6400UF, UN46D7000LF, LN32D430G3D, LN52B540P8F, LN55C610NIF, LN55C650LIF, LN55C630, UN40C6500VF, UN40C6400RF, UN40C6500VR, UN40D6050TF, UN40D6300SF, UN46D6420UF, UN46D6450UF, UN46D6500VF, UN46D6900WF, and UN32D6000SF, and S27A550H (collectively “the Domestic Industry Products”). *Id.*

## **II. STANDARD OF REVIEW**

Once the Commission determines to review an initial determination, its review is conducted *de novo*. *Certain Polyethylene Terephthalate Yarn and Prods. Containing Same*, Inv. No. 337-TA-457, Comm’n Op. at 9 (June 18, 2002). Upon review, the “Commission has ‘all the powers which it would have in making the initial determination,’ except where the issues are limited on notice or by rule.” *Certain Flash Memory Circuits and Prods. Containing Same*, Inv. No. 337-TA-382, USITC Pub. 3046, Comm’n Op. at 9-10 (July 1997) (quoting *Certain Acid-Washed Denim Garments and Accessories*, Inv. No. 337-TA-324, Comm’n Op. at 5 (Nov. 1992)). Commission practice in this regard is consistent with the Administrative Procedure Act. *Certain*

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*EPROM, EEPROM, Flash Memory, and Flash Microcontroller Semiconductor Devices and Prods. Containing Same*, Inv. No. 337-TA-395, Comm'n Op. at 6 (Dec. 11, 2000) (“*EPROM*”); *see also* 5 U.S.C. § 557(b).

Upon review, “the Commission may affirm, reverse, modify, set aside or remand for further proceedings, in whole or in part, the initial determination of the administrative law judge. The Commission may also make any findings or conclusions that in its judgment are proper based on the record in the proceeding.” 19 C.F.R. § 210.45. This rule reflects the fact that the Commission is not an appellate court, but is the body responsible for making the final agency decision. On appeal, only the Commission's final decision is at issue. *See EPROM*, Comm'n Op. at 6 (citing *Fischer & Porter Co. v. U.S. Int'l Trade Comm'n*, 831 F.2d 1574, 1576-77 (Fed. Cir. 1987)).

### III. DISCUSSION

#### A. Claim Construction

The Final ID construes the limitation “structured arc sheet” in claim 6 of the ‘932 patent to mean “a sheet constructed in the shape of an arc.” Final ID at 33. The asserted claims recited the following, with the disputed limitation highlighted:

6. An apparatus for improving uniformity used in a backlight module comprising:

a plurality of light sources for providing an illuminating light;  
a reflective housing adjacent to the light sources for receiving the light sources and reflecting the illuminating light;  
and two **structured arc sheets** mounted at the periphery of the light source for making the illuminating light uniform, wherein said structured arc sheets have different thickness or curvature.

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9. The apparatus as claimed in claim 6, wherein the apparatus is used in a liquid crystal display.

10. The apparatus as claimed in claim 6 wherein the two **structured arc sheets** are not in the same plane.

'932 Patent at 4:20-41 (emphasis added). The parties' proposed constructions of the limitation "a structured arc sheet" in claim 6 were as follows:

Claim Term	ITRI	LG	IA
"a structured arc sheet"	A sheet containing an arc-like structure for altering the pathway of illuminating light in multiple directions	A sheet that is constructed in the shape of an arc	A sheet that is constructed in the shape of an arc

Final ID at 8-12.

ITRI petitioned for review of the Final ID's construction of the limitation "structured arc sheet." Because the Commission decided to remand the investigation to the ALJ to consider the issues of invalidity and patent unenforceability, the Commission determined to review the Final ID in its entirety. *77 Fed. Reg.* at 77093. On review, the Commission has determined to affirm the Final ID's construction of the claim limitation "structured arc sheet" as "a sheet constructed in the shape of an arc." *See* Final ID at 16-33.

**B. Infringement**

The Final ID finds that the Accused Products do not infringe independent claim 6 of the '932 patent under DOE under the Final ID's construction of the claim limitation "structured arc sheet." Final ID at 44.<sup>3</sup> ITRI petitioned for review of the Final ID's finding of non-infringement.

<sup>3</sup> ITRI conceded that the accused products do not literally infringe under the ID's construction of the claim limitation "structured arc sheet." *See* Complainants Industrial Technology Research

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On review, the Commission agrees with the ALJ's finding that the accused products do not infringe the asserted claims of the '932 patent under DOE. However, we disagree with the ALJ's conclusion that the "function" and "result" of the "structured arc sheet" limitation are the same. *See* Final ID at 45-46. The claimed "structured arc sheet" cannot both function by "making the illuminating light uniform" and result in "making the illuminating light uniform." Rather, as LG's expert, Dr. Escuti testified, "alter[ing] the pathway of light in multiple directions" is the function of the "two structured arc sheets." Escuti, Tr. at 645:10-646:6. As such, the functional language of the claim "for making the illuminating light uniform" is most naturally read as being the result of using the claimed "structured arc sheet."

While we disagree with the ALJ characterization of the "function" and the "result," the Final ID's findings on those points are not the sole basis of his finding of non-infringement and do not affect the majority of the ALJ's analysis. The Commission, therefore, finds that the Accused Products do not infringe claims 6, 9, and 10 of the '932 patent under DOE based on the reasoning articulated in the Final ID with the caveat noted above.

### C. **Validity**<sup>4</sup>

#### 1. **Anticipation – Yao '892**

The Remand ID finds that Yao '892 anticipates the asserted claims of the '932 patent, in

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Institute and ITRI International's Petition for Review of the Initial Determination on Violation of Section 337 and Recommended Determination on Remedy and Bonding and Summary Pursuant to 19 C.F.R. § 210.43(B) (Nov. 5, 2012) ("ITRI's Pet.") at 18.

<sup>4</sup> The Commission determined not to review the Remand ID's findings that LG has failed to show by clear and convincing evidence that Azuma '895 anticipates claim 6 of the '932 patent and that LG has failed to show by clear and convincing evidence that claims 6, 9, and 10 of the '932 patent are obvious. *See 78 Fed. Reg.* \_\_\_\_ (date).

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particular, because it discloses the limitation “two structured arc sheets mounted at the periphery of the light source for making the illuminating light uniform, wherein said structured arc sheets have different thickness or curvature” of claim 6 and the limitation “the two structured arc sheets are not in the same plane” of claim 10. Remand ID at 12, 13, 18.<sup>5</sup> LG argued before the ALJ that Yao ‘892 anticipates claims 6, 9, and 10 of the ‘932 patent under both ITRI’s and LG’s construction of the claim limitation “structured arc sheet.” *Id.* ITRI argued before the ALJ that Yao ‘892 does not disclose the limitation “two structured arc sheets” recited in asserted claim 6. *Id.* The IA argued that the asserted claims are anticipated under ITRI’s proposed construction. *Id.*<sup>6</sup>

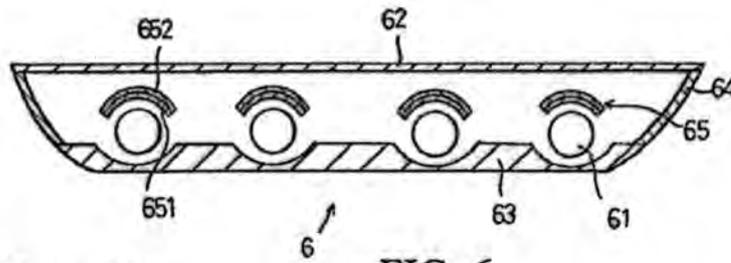
With respect to the disputed limitation “two structured arc sheets” of claim 6, the ALJ noted that Figure 6 of Yao ‘892 shows that “each light source **61** has mounted at its periphery, a component called . . . the ‘lamp reflecting cover [**65**]’ . . . [which] consists of two separate layers, each formed in the shape of an arc – layer **651** called the ‘reflecting layer’ and layer **652** called the ‘light impassable layer[.]’” *Id.* 13-14 (citing JX-29 (Yao ‘892) at Fig. 6, ¶ [0029]; RX-162C (Escuti Direct Witness Statement (“DWS”)) at Q/A 138).

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<sup>5</sup> The Remand ID also finds that there is no dispute that Yao discloses the additional limitations in dependent claim 9 and, thus, that Yao ‘892 also anticipates that claim. *See* Remand ID at 18.

<sup>6</sup> The Final ID adopted LG’s and the IA’s proposed construction of the claim limitation “structured arc sheet” to mean “a sheet constructed in the shape of an arc.” Final ID at 12.

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(JX-0029 at Figure 6.)

FIG. 6

The ALJ also noted that “the ‘lamp reflecting cover **65**’ focuses or reflects light emitted upwards from the lamp **61** to the reflecting plate **63**.” *Id.* at 14. The ALJ further noted that “in Figure 6 . . . the light impassable layer **652** is layered over the reflecting layer **651**.” *Id.*

The ALJ characterized the principal dispute between the parties as being “whether the two layers **651** and **652** in Figure 6 of Yao ‘892 [] each constitute a separate structured arc sheet or whether they can only be considered together as one unit.” *Id.* ITRI argued before the ALJ that Yao ‘892 “discloses a single member, called a ‘lamp reflecting cover,’ that is not structured and is comprised of two layers[,]” which “cannot be considered separate ‘structured arc sheets.’” *Id.* ITRI further argued that “[t]he light impassable layer **652** supports and creates one unified structure **65** with the reflective layer **651** and has no separate optical function.” *Id.*

The ALJ rejected ITRI’s argument, noting that ITRI’s expert, Dr. Silzars, testified at the hearing that “structured arc sheets, when mounted one on top of the other, may be bonded or adhesively attached.” *Id.* (quoting 571:23-573:23). The ALJ found that Dr. Silzars “admit[ted] that two structured arc sheets may be attached together into one unit” and, therefore, that “layers **651** and **652** are not a single structure and can be separate ‘structured arc sheets.’” *Id.* at 15.

The ALJ also noted ITRI’s argument that “light impassable layer **652**’ cannot be a

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structured arc sheet . . . [because] “the ‘light impassable layer’ is not ‘for making the illuminating light more uniform,’ but rather [] is for blocking light, ‘which is the opposite of what [c]laim 6 seeks to achieve.” *Id.* Dr. Silzars testified that “‘a light impassable layer is not a structured arc sheet by the definition of the ‘932 patent. The ‘932 patent describes four possible conditions. It’s either reflective, it’s transmissive, it’s semi-reflective or semi-transmissive. A light-blocking layer does not qualify to any of those, so it is not a structured arc sheet.’” *Id.* (quoting Silzars, Tr. 566:14-567:1). The ALJ found that ITRI’s argument is an improper “attempt to read additional limitations into the claim to avoid anticipation.” *Id.* The ALJ stated that “LG’s expert noted that neither construction imposes any express restriction regarding reflection, refraction, or absorption of light.” *Id.* (citing Silzars, Tr. 532:15-533:7). Moreover, the ALJ found that the claims do not recite any such limitation on the form of the structured arc sheets, and that the specification recites them only as a preferred embodiment of the invention. *Id.* at 15-16 (citing ‘932 patent at 2:2-5). The ALJ also noted that “the ‘light impassable layer 652’ is intended to make the illuminating light more uniform. As the specification of the Yao ‘892 Publication makes clear, the entire purpose of the ‘lamp reflecting cover’ is to make the illuminating light uniform.” *Id.* (citing JX-29 at ¶¶ [0008], [0027], [0032].)<sup>7</sup>

The ALJ also addressed ITRI’s argument that “‘the layers 651 and 652 do not have meaningfully different curvatures’” by noting that the intrinsic evidence does not support reading a minimum curvature limitation into the claims and noting Dr. Silzars’ testimony that “there is no restriction regarding size of the arc.” *Id.* at 16-17 (citing Silzars, Tr. 286:22-287:2, 571:25-

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<sup>7</sup> The Remand ID incorrectly cites to JX-0003, which is the ‘932 patent, instead of JX-0029, which is the Yao ‘892 publication.

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572:11; *see also* CX-350C (Silzars DWS) at Q/A 138, 142 (noting that a difference of 0.0015 inches in the thickness of the sheets is sufficient for infringement)). The ALJ also rejected ITRI's argument that the two layers **651** and **652** in Yao '892 are not "structured" because "Figures 3 and 4 [of Yao '892] show that the reflecting layer in those embodiments is formed directly on the lamp bulb itself and needs no supporting structures as do the embodiments of Figures 5-7 [of the '932 patent]." *Id.* at 17. The ALJ noted that there is no "structure" requirement in either of the parties' proposed claim constructions and that ITRI provides no details as to what it means by its "structure" requirement. *Id.* The ALJ found that the embodiment in Figure 6 of Yao '892 meets ITRI's definition that the sheets "contain arc-like structures," as well as LG's definition that the sheet be "constructed in the shape of [an] arc." *Id.* Furthermore, the ALJ found, "[a]s Figure 6 (and related Figures 5, 7, and 8) shows, the lamp reflecting cover **65** is a separate structure. Figure 6 further shows that the structure is physically divided into two-layers [*sic*], each comprising half the thickness of the structure." *Id.* at 17-18.

With respect to dependent claim 10, which additionally requires that "the two structured arc sheets are not in the same plane," ITRI argued that "the difference in position between the two layers [in Figure 6 of Yao '892] is so insignificant that they cannot be regarded as [being] in different planes." *Id.* at 18-19. The ALJ rejected this argument, finding that "the light impassable layer **652** is layered over the reflecting layer **651**" and thus that "the Yao '892 Publication discloses that two structured arc sheets are not in the same plane." *Id.* at 19 (citing JX-29 at Figure 6; RX-0162C (Escuti DWS) at Q/A 140).

We agree with the Remand ID's finding that Yao '892 anticipates the asserted claims. We believe, however, that some clarification of the analysis is warranted with respect to the

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ALJ's characterization of Dr. Silzar's testimony in rejecting ITRI's argument that the two layers 651 and 652 are, in fact, only one member, namely, the "lamp reflecting cover 65." *See id.* at 14-15 (citing Silzars, Tr. at 571:23-573:23). In particular, ITRI contends that Dr. Silzars was merely explaining whether "two structured arc sheets" could be "mounted at the periphery of the light source" by being bonded or adhesively attached, not that "structured arc sheets, when mounted one on top of the other, may be bonded or adhesively attached." *See Silzars, Tr. 572:7-573:23.*

The ALJ relied on the following testimony of Dr. Silzars:

Q. Could we have Figure 19 of Katoh on the screen, please? Dr. Silzars, in Figure 19 of Katoh, there's two layers disclosed there, correct?

A. It's -- it's -- *Katoh calls it one member that consists of two -- of two -- of two films or two layers, yes. But they're on top of the -- on top of the fluorescent tube and bonded right to the top.*

Q. Thank you. So we can agree that, in Katoh, there's a disclosure of two layers or two films bonded one on top of the other, correct?

A. Yes. Yes.

Q. And do you recall providing testimony yesterday about how the structured arc sheets are mounted?

A. In general, I do.

Q. *And do you recall providing testimony yesterday about how one of ordinary skill in the art used the term "mounted" to mean, for example, attached to or bonded to?*

A. I think my -- what at least the intent of my testimony was, that it is, again, somewhat contextual, that, depending on what we're discussing, if we're mounting a picture on a wall, if we're, you know, mounting a stamp on an envelope, that there's different -- different possibilities. But that my intent was that the word "mounted" does not require a

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special construction for the '932 patent that normal usage would be – would be adequate, I thought.

Q. Thank you. And that normal usage would include being bonded, correct?

A. Well, I think, again, if we were discussing, and I would, *in this case, I would say bonded. I would not really use the term "mounted," if I meant that the two layers were – were tightly attached, if they were made, in fact, if, for example, 18 is simply paint on top of 17, then I would not say that the paint is mounted on 17. I would say that it's bonded or coated or painted on.* So I think it would – I would be – feel better about saying in the context of certain materials, if we are adhesively attaching or we're painting or we're layering on top, *if we're physically putting two metal pieces together, then I'd say maybe one is mounted on top of the other.*

Silzars, Tr. at 571:23-573:23 (emphasis added). With respect to his previous testimony regarding the meaning of “mounted,” referred to above, Dr. Silzars stated the following:

Q. So one of ordinary skill in the art would understand that the term mounted could mean, for example, attached to or adhesively bonded, correct?

A. Yes, it could have a variety of meanings. I think it would have the same meaning in this context, as it would in our everyday lives, if we think about mounting something, we can mount a photograph, we can mount a picture, we can mount a bike rack. So all of those, I think, would be suitable interpretations.

Silzars, Tr. at 340:24:341:10. With respect to Katoh '331 in particular, Dr. Silzars further testified as follows:

Q. And look at the paragraph – the second paragraph underneath Figure 9 on, I believe its page 12 of your witness statement. “Neither layers 17 nor 18” – and you’re referring to layers in Katoh – “are structured arc sheets. These layers are not structured, as they contain no structure of their own. *Layer 17 is formed directly on the light source rather than at the periphery.*” And then you go on. Do you see that?

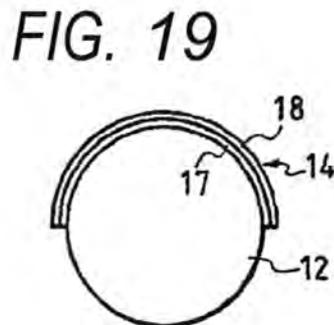
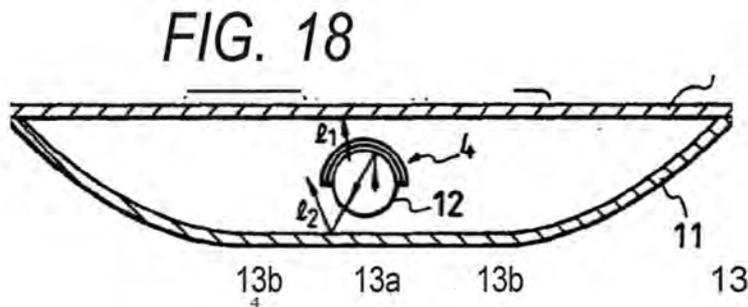
A. I do, yes.

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Q. So the structured arc sheet recited in the claim has to have its own structure, it has to be self – supporting, right?

A. What I am describing here is that in Katoh, there are two films that are applied to the CCFL. They could be paint. They could be something that is – has no structure whatsoever. Katoh describes them as a single member, and in the context that it's not a sheet. This is simply a thin paint-like film that's been put onto the CCFL.

Silzars, Tr. at 164:8-165:4 (emphasis added). Figures 18 and 19 of Katoh '331 illustrate the following:



Taking the full context of Dr. Silzars' testimony, it is clear that he is discussing whether or not layers 17 and 18 in Figure 19 of Katoh '331 can be considered "structured arc sheets" and whether they satisfy the limitation "mounted at the periphery of the light source" of claim 6 of the '932 patent. As ITRI rightly notes, Dr. Silzars testified that "he generally would not regard two layers bonded together to be mounted one on the other." Furthermore, we note that,

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although the Remand ID presents as a quote Dr. Silzars' alleged admission that "structured arc sheets, when mounted one on top of the other, may be bonded or adhesively attached," this exact wording does not appear anywhere in Dr. Silzars' cited testimony. See Remand ID at 14.

Dr. Silzars' testimony nevertheless provides support for the ALJ's finding that Yao '892 discloses "two structured arc sheets." In particular, Dr. Silzars stated that "if we're physically putting two metal pieces together, then I'd say maybe one is mounted on top of the other." Silzars, Tr. at 573:21-23. The question, therefore, is whether layers 651 and 652 disclosed in Yao '892 are in any way painted layers such that they cannot be said to be mounted or whether they are separate pieces. A closer look at Yao '892 is instructive.

Yao '892 discloses several embodiments of its improved backlight module. In particular, the so-called "Second Embodiment" of Yao '892 teaches a "reflecting layer 45" that is "an upper part of an outer surface" of the light source, "lamps 41." JX-29 at [0023], Fig. 4:

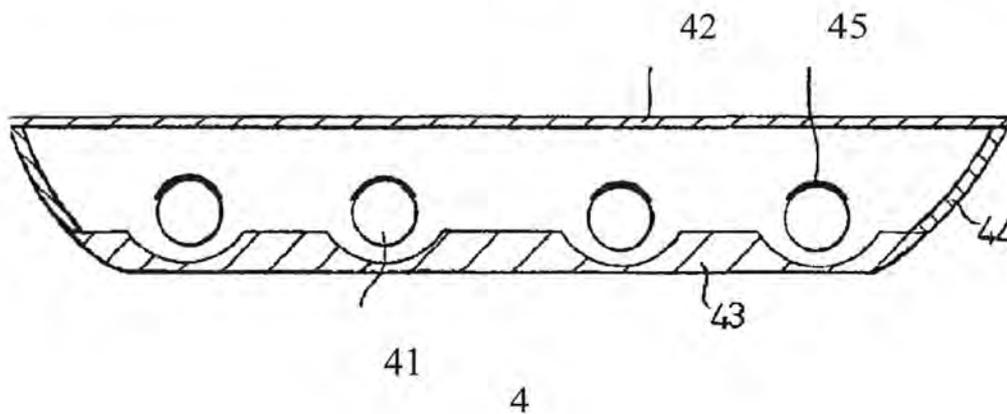


FIG. 4

The embodiment on which LG relies, the so-called "Fourth Embodiment" teaches that "reflecting layer 651" and "light impassable layer 652" are separate layers that comprise "lamp reflecting cover 65." *Id.* at [0029], Fig. 6. There is no indication in the disclosure of Yao '892

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that layers **651** and **652** are “formed directly on” each other or are somehow “coated” or “painted” on each other such that they could not be considered separate layers that are “mounted” onto each other. ITRI noted Dr. Silzars’ testimony concerning the use of “laminations of multiple layers . . . creating one structure,” but Yao ‘892 does not hint that layers **651** or **652** are “laminations.” *See* Silzars, Tr. at 349:22-350:15. Nor does ITRI explain why laminations should not be considered separate “structured arc sheets.” As such, we agree with the ALJ that layer **651** and **652** disclosed in Yao ‘892 are the “two structured arc sheets” of claim 6.

We otherwise agree with the remainder of the ALJ’s analysis. The Commission, therefore, finds that Yao ‘892 anticipates claims 6, 9, and 10 of the ‘932 patent with the above clarification concerning the testimony of ITRI’s expert.

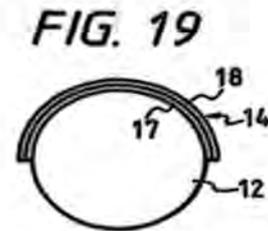
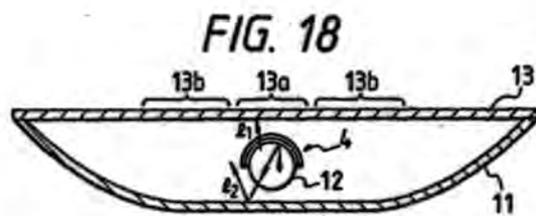
### **2. Anticipation – Katoh ‘331**

The Remand ID finds that LG has failed to prove by clear and convincing evidence that Katoh ‘331 anticipates claims 6 and 10 of the ‘932 patent. Remand ID at 9.<sup>8</sup> The ALJ noted that the primary dispute between the parties is “whether the Katoh ‘331 patent discloses a ‘plurality of light sources.’” *Id.* ITRI noted to the ALJ that LG relies on Figures 18 and 19 of Katoh ‘331. *Id.* at 10.

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<sup>8</sup> LG did not assert that Katoh ‘331 anticipates claim 9 of the ‘932 patent. Remand ID at 9.

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JX-0031 (Katoh '331) at Figures 18 and 19.

ITRI argued that “LG and Staff improperly attempt to piece together different embodiments disclosed in the Katoh ‘331 patent to create an anticipating device.” *Id.* at 9-10. Specifically, ITRI argued that Figures 18 and 19 of Katoh ‘331 “only disclose a single light source . . . [and] that LG and Staff instead rely on a different embodiment disclosed in the Katoh ‘331 patent (that does not show the asserted ‘structured arc sheets’) for the ‘plurality of light sources’ limitation. *Id.* ITRI asserted that anticipation cannot be shown by the “mixing and matching of different embodiments, even if disclosed in the same reference[.]” *Id.*

The ALJ agreed with ITRI that “to anticipate, a reference must *identically* disclose the claimed invention. *Id.* (citing *Net MoneyIN, Inc. v. Verisign, Inc.*, 545 F.3d 1359, 1371 (Fed. Cir. 2008) (discussing that an anticipatory reference must disclose the same arrangement of features as the claimed invention)). The ALJ found that Katoh ‘331 “clearly discloses embodiments with a plurality of light sources. However, the embodiment that LG relies upon appears to only disclose a single light source, or at the very least, it is ambiguous whether it can be used with multiple light sources.” *Id.* The ALJ further found that “LG failed to present evidence establishing clearly and convincingly that this embodiment and this ‘light altering means’ (the Katoh ‘331 patent’s name for the alleged ‘structured arc sheets’) can be used with multiple light

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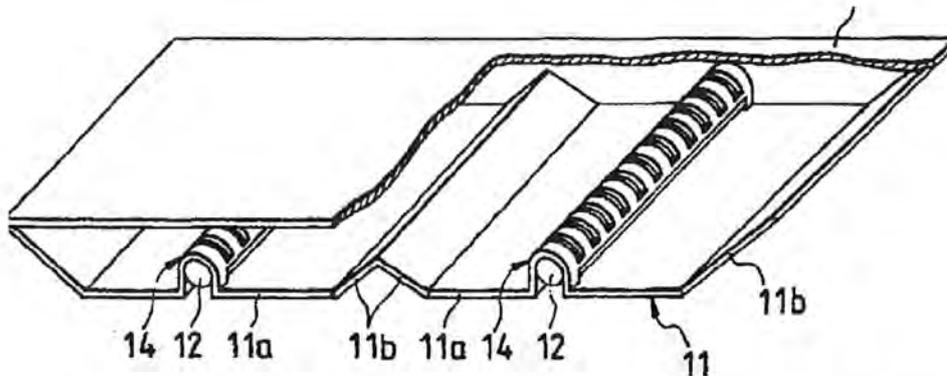
sources.” *Id.* The ALJ noted that LG’s argument that “the Katoh ‘331 patent discloses the use of multiple light sources with other embodiments that could be combined with ‘Embodiment 3[,]’” the specification’s name for the embodiment shown in figures 18 and 19, “invoke[s] the question of obviousness, not anticipation.” *Id.* at 11 (citing *Net MoneyIN*, 545 F.3d at 1371).

For the reasons discussed below, the Commission finds that the ALJ’s analysis concerning why Katoh ‘331 does not disclose the limitation “a plurality of light sources” is not supported by the disclosure of Katoh ‘331.

The ALJ found that the embodiment of Katoh ‘331 on which LG relied for anticipation – “Embodiment 3” as illustrated in Figures 18 and 19 of Katoh ‘331 – does not teach a device that employs more than one light source. *Id.* at 10. The ALJ is correct that a finding of anticipation requires a reference to identically disclose the claimed invention “clearly and unequivocally . . . without any need for picking, choosing, and combining various disclosures *not directly related to each other by the teachings of the cited reference.*” *Id.* at 10-11 (emphasis added) (quoting *Net MoneyIN*, 545 F.3d at 1371). The disclosure of the various embodiments taught in Katoh ‘331, however, are, in fact, “directly related to each other” such that LG’s contention that embodiment 3 of Katoh ‘311 discloses “a plurality of light sources” is completely appropriate.

Figure 6 of Katoh ‘331 discloses the so-called “Embodiment 1.”

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JX-31 (Katoh '331) at Fig. 6. Specifically the specification of Katoh '331 states the following:

In these drawings, *the reference numeral 11 represents a reflecting plate consisting of a flat bottom surface 11a, both ends and an intermediate inclined surface 11b, and having an inside mirror surface, the reference numeral 12 designates a linear light source located over the central portion of the bottom surface 11a of the reflecting plate 11, the reference numeral 13 denotes a diffusing plate arranged on the side opposite to the reflecting plate 11 with regard to the light source 12, and the reference numeral 14 represents a light quantity adjusting member arranged so as to surround the side of the light source 12 on the side of the diffusing plate 13 and formed integral with the reflecting plate.*

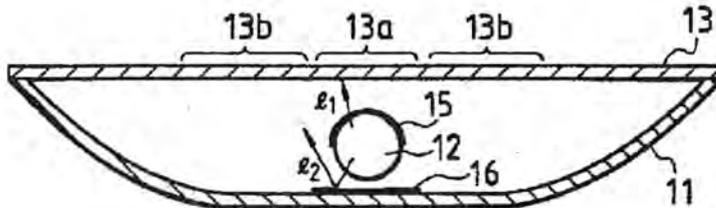
*Id.* at 3:65-4:10 (emphasis added). The ALJ acknowledged that “Embodiment 1” may disclose a plurality of light sources, such that the two halves of “reflecting plate 11” separated by “intermediate inclined surface 11b” counts as a single reflective housing. Remand ID at 10. The question is whether the other embodiments of Katoh '331 have the same type of reflective housing as is disclosed in “Embodiment 1.”

“Embodiment 2” of Katoh '331, which is illustrated in Figure 9, is explicitly described as follows:

[T]he reference numeral 11 represents a reflecting plate, the reference numeral 12 designates a linear light source and the reference numeral 13 denotes a diffusing plate: *these members being substantially the same as those used in the Embodiment 1.* The reference numeral 15 represents a light quantity adjusting member arranged on the top surface of a

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fluorescent tube **12** used as the linear light source and composed of a light-shielding film. . . .”



**FIG. 9**

*Id.* at Fig. 9, 5:48-56 (emphasis added). As is clear from this disclosure, although “Embodiment 2” as shown in Figure 9 appears to employ only a single light source in a single enclosed housing, “reflecting plate 11” is, in fact, the same as the split housing using a plurality of light sources disclosed in “Embodiment 1.”

“Embodiment 3,” on which LG relies for anticipation does not similarly explain that “reflecting plate **11** shown in Figure 18 is the same as the “reflecting plate **11**” of Figure 6. The only difference explicitly called out in “Embodiment 3,” however, is the form of the “light quantity adjusting member.” Whereas, in Embodiment 2, “light quantity adjusting member [**15** is] arranged on the top surface of a fluorescent tube **12** . . . and [is] composed of a light-shielding film” (*id.* at 5:53-56), the “light quantity adjusting member in “Embodiment 3” is described as follows:

In this embodiment, a light absorptive layer or low-reflectance layer **18** is formed as *the light quantity adjusting member 14*, with a reflecting layer **17** interposed, on the top surface of the fluorescent tube **12** used as the linear light source.

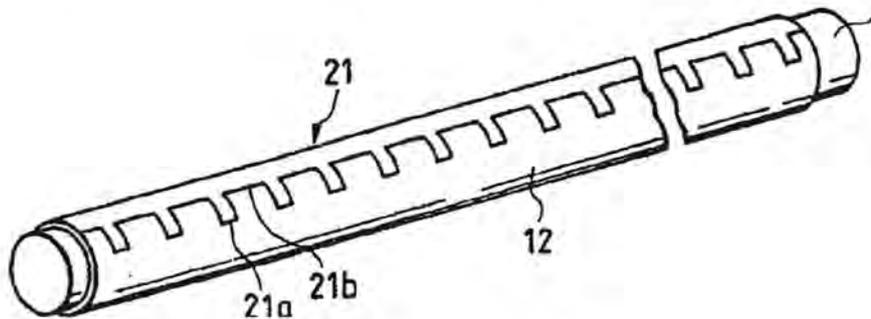
*Id.* at Figs. 18, 19, 7:45-49 (emphasis added). It is reasonable to assume that nothing has

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changed between “Embodiment 2” and “Embodiment 3” except for the form of the “light quantity adjusting member,” especially since Figures 9 and 18 are otherwise identical. In that case, “reflecting plate 11” of Figure 18 would still be the split housing using a plurality of light sources disclosed in “Embodiment 1.”

The description of “Embodiment 4” lends credence to the conclusion that the “reflecting plate 11” illustrated in Figure 6 is intended to be the same for all of the embodiments disclosed in Katoh ‘331. Specifically, “Embodiment 4” as illustrated in Figure 20 is described as follows:

The Embodiment 4 is different from the other embodiments in the light quantity adjusting member formed on the fluorescent tube used as the linear light source, *and is the same as the other embodiments in the other members.* Accordingly, only the fluorescent tube is shown in FIG. 20. In this drawing, the reference numeral 21 represents the light quantity adjusting member which is made of an electrically conductive material, *unlike the light quantity adjusting members used in the other embodiments. . . .*



**FIG. 20**

*Id.* at Fig. 20, 8:19-25 (emphasis added).

Taking all of these four embodiments together, it is clear that only certain features, in particular, the “light quantity adjustment member” differs between the embodiments. We also

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note that the same reference number “11” is used for the “reflective housing” in all of the embodiments and that both “Embodiment 1” and “Embodiment 3” share the reference number “14” for the “light quantity adjusting member” disclosed in those embodiments. The rules governing the annotation of patent drawings dictate that reference numbers used in patents must uniquely identify features of the invention. *See* 37 C.F.R. § 1.84(p)(4) (“The same part of an invention appearing in more than one view of the drawing must always be designated by the same reference character, and the same reference character must never be used to designate different parts.”)

Based on an examination of the disclosure of Katoh ‘331, we find that the ALJ erred in concluding that Figure 18 of Katoh ‘331 cannot disclose “a plurality of light sources” as recited in claim 6 of the ‘932 patent. We note, however, that the ALJ did not address any of the other issues ITRI disputed concerning the scope of Katoh ‘331, in particular whether Katoh ‘331 discloses the “two structured arc sheets” limitation of claim 6. *See* Remand ID at 9; Complainants [ITRI’s] Post-Hearing Br. (“ITRI’s PHB”) at 42 (Aug. 13, 2012) (“One layer, called a ‘light quantity adjusting member, is mounted directly on rather than at the periphery of the light source. The other layer, called a “low-reflectance” or “light absorptive layer,” is simply a layer coated with black paint. Neither layer has independent structure. (*See* Silzars, Tr. 164:19-165:22.)”).

In its post-hearing brief, LG asserted that Katoh ‘331 discloses all of the limitations of the asserted claims of the ‘932 patent. *See* Respondents [LG’s] Post-Hearing Brief (Aug. 13, 2012) at 41-43. ITRI argued in its post-hearing brief, however, that Katoh ‘331 fails to teach several limitations of asserted claim 6, asserting that the “‘light quantity adjusting member[.]’ [of Katoh

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'331] is mounted directly on rather at the periphery of the light source.” See Complainants [ITRI’s] Post-Hearing Brief (Aug. 13, 2012) at 42-43. In its post-hearing reply brief, however, LG failed to respond to ITRI’s argument concerning whether Katoh ’331 discloses the limitation “two structured arc sheets mounted at the periphery of the light source[.]” See Respondents [LG’s] Post-Hearing Reply Brief (Aug. 27, 2012) at 16-17. Rather, LG mistakenly contends that “ITRI concedes that Katoh ’331 discloses every limitation of claim 6 and 10” with the exception of the limitation “two structured arc sheets.” *Id.* LG never offers a response to ITRI’s argument concerning the placement of the “light quantity adjusting member” disclosed in Katoh ’331 with respect to the limitation “two structured arc sheets *mounted at the periphery of the light source*” of claim 6. As such, the Commission finds that LG has failed to satisfy its burden of showing by clear and convincing evidence that Katoh ’331 anticipates the asserted claims of the ’932 patent.

### **D. Domestic Industry**

#### **1. Technical Prong**

The Final ID finds that ITRI has failed to satisfy the technical prong of the domestic industry requirement. Final ID at 54. Specifically, the ALJ noted that the parties agreed that the analysis for infringement of the Accused Products and the technical prong analysis of the asserted Domestic Industry Products are “essentially identical, at least with respect to the accused ‘structured arc sheets.’” *Id.* The ALJ found that under the ID’s construction of the limitation “structured arc sheets” of claim 6 of the ’932 patent, the asserted Domestic Industry Products “do not literally practice any of the asserted claims[.]” *Id.* at 55. Regarding DOE, the ALJ noted that ITRI’s technical prong arguments mirrored its infringement arguments. *Id.* As such, the ALJ found that ITRI has not satisfied the technical prong requirement. ITRI

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acknowledged that, under the Final ID's construction of the "structured arc sheet" limitation, the asserted Domestic Industry Products do not literally practice the asserted claims. *See* ITRI's Pet. at 21. Furthermore, as the ALJ noted, ITRI presented no new arguments concerning whether it has satisfied the technical prong requirement under a DOE analysis. Final ID at 55.

Because the Commission decided to remand the investigation to the ALJ to consider the issues of invalidity and patent unenforceability, the Commission determined to review the Final ID in its entirety. *77 Fed. Reg.* at 77093. As with the issue of infringement under DOE, we disagree with the ALJ's characterization of the "function" and the "result" with respect to his technical prong analysis. *See supra* at 8. Because the Final ID's findings on those points are not the sole basis of his finding and do not affect the majority of the ALJ's analysis, the Commission likewise finds that ITRI has failed to satisfy the technical prong of the domestic industry requirement with the caveat noted above.

### **2. Economic Prong**

The Final ID finds that ITRI, through its licensee Samsung Electronics America, Inc. ("Samsung"), has satisfied the economic prong of the domestic industry requirement by its "significant employment of labor and capital and significant investment in plant and equipment [prongs (A) and (B)] to provide service and repair of the Domestic Industry Products." Final ID at 61. ITRI argued in its petition for review that the ALJ erred by not considering certain of Samsung's investments, in particular, those made before ITRI and Samsung entered into their license agreement. Because the Commission decided to remand the investigation to the ALJ to consider the issues of invalidity and patent unenforceability, the Commission determined to review the Final ID in its entirety. *77 Fed. Reg.* at 77093. The Remand ID's findings on validity

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and unenforceability do not affect the ALJ's finding regarding the economic prong.

On review, the Commission has determined to affirm the Final ID's finding that ITRI has satisfied the economic prong of the domestic industry requirement. In particular, we find that ITRI's petition is moot because the ALJ found that ITRI satisfied the economic prong of the domestic industry requirement even without including Samsung's investments prior to the May 2010 execution of the license agreement between Samsung and ITRI. Final ID at 61. Moreover, we note that neither the IA nor LG petitioned for review of this finding.

### IV. CONCLUSION

For the reasons discussed above, the Commission finds no violation of section 337 with respect to the '932 patent.

By order of the Commission



Lisa R. Barton  
Acting Secretary to the Commission

Issued: May 17, 2013

**CERTAIN DEVICES FOR IMPROVING UNIFORMITY  
USED IN A BACKLIGHT MODULE AND PRODUCTS  
CONTAINING THE SAME**

Inv. No. 337-TA-805

**PUBLIC CERTIFICATE OF SERVICE**

I, Lisa R. Barton, hereby certify that the attached **COMMISSION OPINION** has been served by hand upon the Commission Investigative Attorney, Vu Q. Bui, Esq., and the following parties as indicated on **May 17, 2013**.



Lisa R. Barton, Acting Secretary  
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(  ) ~~Via Overnight Delivery~~  
( ) Via First Class Mail  
( ) Other: \_\_\_\_\_

**On Behalf of Respondents LG Electronics, Inc., LG  
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( ) ~~Via Hand Delivery~~  
(  ) ~~Via Overnight Delivery~~  
( ) Via First Class Mail  
( ) Other: \_\_\_\_\_

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UNITED STATES INTERNATIONAL TRADE COMMISSION  
Washington, D.C.

**In the Matter of**

**CERTAIN DEVICES FOR IMPROVING  
UNIFORMITY USED IN A BACKLIGHT  
MODULE AND COMPONENTS  
THEREOF AND PRODUCTS  
CONTAINING SAME**

**Inv. No. 337-TA-805  
REMAND**

**INITIAL DETERMINATION ON REMAND REGARDING  
VALIDITY AND ENFORCEABILITY**

Administrative Law Judge Theodore R. Essex

(February 28, 2013)

**Appearances:**

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*For the Commission Investigative Staff:*

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This is the administrative law judge's Final Initial Determination On Remand on the Issues of Validity and Enforceability under Commission Rules 210.42(a) and 210.43-46 pursuant to a Commission Order of December 21, 2012, for the investigation of the in the matter of *Certain Devices for Improving Uniformity Used in a Backlight Module and Components Thereof and Products Containing the Same*, United States International Trade Commission Investigation No. 337-TA-805. *See* 19 C.F.R. § 210.42(a).

It is held that U.S. Patent No. 6,883,932 is invalid under 35 U.S.C. § 102 and that no violation of section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337, has occurred in the importation into the United States, the sale for importation, or the sale within the United States after importation of certain devices for improving uniformity used in a backlight module and components thereof and products containing the same that infringe one or more of claims 6, 9 and 10 of U.S. Patent No. 6,883,932.

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The following abbreviations may be used in this Initial Determination:

<b>CDX</b>	Complainants' demonstrative exhibit
<b>CIB</b>	Complainants' initial post-hearing brief
<b>CPX</b>	Complainants' physical exhibit
<b>CRB</b>	Complainants' reply post-hearing brief
<b>CX</b>	Complainants' exhibit
<b>Dep.</b>	Deposition
<b>JX</b>	Joint Exhibit
<b>RDX</b>	Respondents' demonstrative exhibit
<b>RIB</b>	Respondents' initial post-hearing brief
<b>RPX</b>	Respondents' physical exhibit
<b>RRB</b>	Respondents' reply post-hearing brief
<b>RRX</b>	Respondents' rebuttal exhibit
<b>RX</b>	Respondents' exhibit
<b>SIB</b>	Staff's initial post-hearing brief
<b>SRB</b>	Staff's reply post-hearing brief
<b>Tr.</b>	Transcript
<b>ITRI</b>	Complainants Industrial Technology Research Institute and ITRI International
<b>LG</b>	Respondents LG Electronics, Inc., LG Electronics U.S.A., Inc., LG Display Co., Ltd., and LG Display America, Inc.
<b>Staff</b>	Commission Investigative Staff

## I. BACKGROUND

The ALJ issued a Final Initial Determination (ID) in this investigation on October 22, 2012. On December 21, 2012, the Commission gave notice of its decision and order to remand part of this investigation to the ALJ for further proceedings to “consider the parties’ invalidity and unenforceability arguments and make appropriate findings.”<sup>1</sup>

Because the Commission has not yet opined on the proper claim construction, the ALJ applies the claim construction he set forth the October 22, 2012 Final Initial Determination.<sup>2</sup> Furthermore, because the parties fully briefed the issues already, the ALJ determined that no further briefing or hearings were necessary.

## II. INVALIDITY

### A. Anticipation

#### 1. Legal Standard

A patent may be found invalid as anticipated under 35 U.S.C. § 102(a) if “the invention was known or used by others in this country, or patented or described in a printed publication in this country, or patented or described in a printed publication in a foreign country, before the

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<sup>1</sup> See Notice of Commission Decision to Review a Final Initial Determination Finding No Violation of Section 337; Remand-In-Part of the Investigation to the Administrative Law Judge (December 21, 2012).

<sup>2</sup> The ALJ notes that the Commission’s decision to remand these issues for decision is somewhat puzzling because this investigation almost entirely turns on the proper construction of a single claim term —“structured arc sheet.” The few issues that do not — inequitable conduct and Section 112 defenses — are meritless, as set forth *infra*. However, the Commission does not provide any guidance on the construction of that term in its remand order. Indeed, the Notice stated that the Commission intends to review that construction once it receives this remand ID. Thus, this remand ID finally resolves only a few immaterial issues, especially in light of the ALJ’s findings on infringement and domestic industry. The other issues in this remand ID will have to be re-decided if the Commission determines to alter the construction of “structured arc sheet,” which the Commission could have easily decided upon the issuance of the Final ID in October 2012. Moreover, as the ALJ has already determined that there is no violation of Section 337 based on non-infringement and failure to establish a domestic industry, this remand ID largely amounts to a “moot court” exercise especially in light of the ALJ’s finding of invalidity as set forth *infra*.

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invention thereof by the applicant for patent.” 35 U.S.C. § 102(a).<sup>3</sup> A patent may be found invalid as anticipated under 35 U.S.C. § 102(b) if “the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States.” 35 U.S.C. § 102(b). Under 35 U.S.C. § 102(e), a patent is invalid as anticipated if “the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent.” 35 U.S.C. § 102(e). Anticipation is a question of fact. *Texas Instruments, Inc. v. U.S. Int’l Trade Comm’n*, 988 F.2d 1165, 1177 (Fed. Cir. 1993) (“*Texas Instruments II*”). Anticipation is a two-step inquiry: first, the claims of the asserted patent must be properly construed, and then the construed claims must be compared to the alleged prior art reference. *See, e.g., Medichem, S.A. v. Rolabo, S.L.*, 353 F.3d 928, 933 (Fed. Cir. 2003). It is axiomatic that claims are construed the same way for both invalidity and infringement. *W.L. Gore v. Garlock, Inc.*, 842 F.2d 1275, 1279 (Fed. Cir. 2008.)

“Claimed subject matter is ‘anticipated’ when it is not new; that is, when it was previously known. Invalidation on this ground requires that *every element and limitation* of the claim was *previously described in a single prior art reference*, either *expressly or inherently*, so as to place a person of ordinary skill in possession of the invention.” *Sanofi-Synthelabo v. Apotex, Inc.*, 550 F.3d 1075, 1082 (Fed. Cir. 2008) (emphasis added) (citing *Schering Corp. v. Geneva Pharms., Inc.*, 339 F.3d 1373, 1379 (Fed. Cir. 2003) and *Continental Can Co. USA v. Monsanto Co.*, 948 F.2d 1264, 1267-69 (Fed. Cir. 1991)).

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<sup>3</sup> The ALJ notes that a number of the provisions (and the numbering) of Title 35 have changed with the passage the Leahy-Smith America Invents Act. Because this action was filed before the passage of that act and deals the ALJ cites only to the relevant provisions as they were before the AIA.

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To anticipate, a single prior art reference must be enabling and it must describe the claimed invention, *i.e.*, a person of ordinary skill in the field of the invention must be able to practice the subject matter of the patent based on the prior art reference without undue experimentation. *Sanofi*, 550 F.3d at 1082. The presence in said reference of *both* a specific description and enablement of the subject matter at issue are required. *Id.* at 1083.

To anticipate, a prior art reference also must disclose all elements of the claim within the four corners of said reference. *Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1369 (Fed. Cir. 2008); *see also Abbott Labs. v. Sandoz, Inc.*, 544 F.3d 1341, 1345 (Fed. Cir. 2007) (stating, “Anticipation is established by documentary evidence, and requires that every claim element and limitation is set forth in a single prior art reference, in the same form and order as in the claim.”). Further, “[b]ecause the hallmark of anticipation is prior invention, the prior art reference—in order to anticipate under 35 U.S.C. § 102—must not only disclose all elements of the claim within the four corners of the document, but must also disclose those elements ‘arranged as in the claim.’” *Id.* (quoting *Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 1548 (Fed. Cir. 1983)). The Federal Circuit explained this requirement as follows:

The meaning of the expression ‘arranged as in the claim’ is readily understood in relation to claims drawn to things such as ingredients mixed in some claimed order. In such instances, a reference that discloses all of the claimed ingredients, but not in the order claimed, would not anticipate, because the reference would be missing any disclosure of the limitations of the claimed invention ‘arranged as in the claim.’ But the ‘arranged as in the claim’ requirement is not limited to such a narrow set of ‘order of limitations’ claims. Rather, *our precedent informs that the ‘arranged as in the claim’ requirement applies to all claims and refers to the need for an anticipatory reference to show all of the limitations of the claims arranged or combined in the same way as recited in the claims, not merely in a particular order.* The test is thus more accurately understood to mean ‘arranged or combined in the same way as in the claim.’

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*Id.* at 1370 (emphasis added). Therefore, it is not enough for anticipation that a prior art reference simply contains all of the separate elements of the claimed invention. *Id.* at 1370-71 (stating that “it is not enough [for anticipation] that the prior art reference discloses part of the claimed invention, which an ordinary artisan might supplement to make the whole, or that it includes multiple, distinct teachings that the artisan might somehow combine to achieve the claimed invention.” (emphasis added)). Those elements must be arranged or combined in said reference in the same way as they are in the patent claim.

If a prior art reference does not expressly set forth a particular claim element, it still may anticipate the claim if the missing element is inherently disclosed by said reference. *Trintec Indus., Inc. v. Top-U.S.A. Corp.*, 295 F.3d 1292, 1295 (Fed. Cir. 2002); *In re Robertson*, 169 F.3d 743, 745 (Fed. Cir. 1999). Inherent anticipation occurs when “the missing descriptive material is ‘necessarily present,’ not merely probably or possibly present, in the prior art.” *Id.* In other words, inherency may not be established by probabilities or possibilities. *See Continental Can*, 948 F.2d at 1268. Thus, “[t]he mere fact that a certain thing may result from a given set of circumstances is not sufficient.” *Id.*

The critical question for inherent anticipation here is whether, as a matter of fact, practicing an alleged prior art reference necessarily features or results in each and every limitation of the asserted claim at issue. *See, e.g., Toro Co. v. Deere & Co.*, 355 F.3d 1313, 1320 (Fed. Cir. 2004).

If there are “slight differences” between separate elements disclosed in a prior art reference and the claimed invention, those differences “invoke the question of obviousness, not anticipation.” *NetMoneyIN*, 545 F.3d at 1071; *see also Trintec*, 295 F.3d at 1296 (finding no anticipation and stating that “the difference between a printer and a photocopier may be minimal

and obvious to those of skill in this art. Nevertheless, obviousness is not inherent anticipation.”). Statements such as “one of ordinary skill may, in reliance on the prior art, complete the work required for the invention,” and that “it is sufficient for an anticipation if the general aspects are the same and the differences in minor matters is only such as would suggest itself to one of ordinary skill in the art,” *actually relate to obviousness*, not anticipation. *Connell*, 722 F.2d at 1548.

## **2. Katoh '331 Patent**

U.S. Patent No. 5,101,331 to Katoh (JX-0031) (“Katoh '331 Patent”) issued on March 31, 1992. (JX-0031; RX-0162C at Q&A 119-122.) The ALJ finds that the Katoh '331 Patent is prior art under 35 U.S.C. § 102(b), because it published as a patent more than one year prior to the priority date of July 17, 2003. (RX-0162C at Q&A 119-122.)

LG contends that the Katoh '331 Patent anticipates claim 6 and 10 of the '932 Patent under both ITRI's and LG's construction for the term “structured arc sheet.” (RIB at 41-43.)

ITRI contends that the Katoh '331 Patent does not anticipate because it does not disclose “a plurality of light sources...” and “two structured arc sheets....” (CIB at 42-43; CRB at 20-22.)

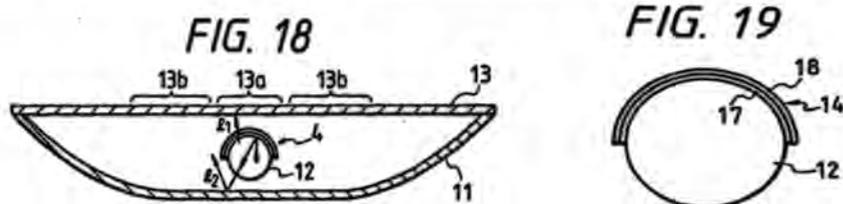
Staff submits that the Katoh '331 Patent anticipates claims 6 and 10 of the '932 Patent under ITRI's claim construction. (SIB at 47.)

LG has not argued that the Katoh '331 Patent anticipates claim 9 of the '932 Patent. Accordingly, the ALJ finds that LG has not proven that the Katoh '331 Patent anticipates claim 9.

The ALJ further finds that LG has failed to prove by clear and convincing evidence that the Katoh '331 Patent anticipates claims 6 and 10 of the '932 Patent. Claim 6 requires “a plurality of light sources for providing an illuminating light.” The parties dispute whether the Katoh '331 Patent discloses a “plurality of light sources.” Specifically, ITRI argues that LG and

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Staff improperly attempt to piece together different embodiments disclosed in the Katoh '331 Patent to create an anticipating device. ITRI argues that LG relies on Figures 18 and 19 (reproduced below) as disclosure of the claimed requirement that the device have “two structured arc sheets....” However, ITRI notes that these figures only disclose a single light source. ITRI asserts that LG and Staff instead rely on a different embodiment disclosed in the Katoh '331 Patent (that does not show the asserted “structured arc sheets”) for the “plurality of light sources....” ITRI argues that anticipation does not allow this mixing and matching of different embodiments, even if disclosed in the same reference, to prove anticipation.



JX-0031 (Katoh '331) at Figures 18 and 19.

The ALJ finds that ITRI is correct that to anticipate, a reference must *identically* disclose the claimed invention. See *Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1371 (Fed. Cir. 2008); *In re Arkley*, 455 F.2d 586, 587 (C.C.P.A. 1972) (“[R]ejections under 35 U.S.C. § 102 are proper only when the claimed subject matter is identically disclosed or described in the prior art.” (emphasis and internal quotation marks omitted)). The ALJ agrees that the Katoh '331 Patent clearly discloses embodiments with a plurality of light sources. However, the embodiment that LG relies upon appears to only disclose a single light source, or at the very least, it is ambiguous whether it can be used with multiple light sources. LG failed to present evidence establishing clearly and convincingly that this embodiment and this “light altering means” (the Katoh '331 Patent’s name for the alleged “structured arc sheets”) can be used with multiple light sources. The Federal Circuit has

instructed that “it is not enough that the prior art reference discloses part of the claimed invention, which an ordinary artisan might supplement to make the whole, or that it includes multiple, distinct teachings that the artisan might somehow combine to achieve the claimed invention.” *NetMoneyIN*, 545 F.3d at 1371. Instead, for anticipation, “the [prior art] reference must clearly and unequivocally disclose the claimed [invention] or direct those skilled in the art to the [invention] without any need for picking, choosing, and combining various disclosures not directly related to each other by the teachings of the cited reference.” *See Arkley*, 455 F.2d at 587. The ALJ further agrees that a case could be made that the Katoh ’331 Patent’s “Embodiment 3” (the specification’s name for the embodiment shown in Figures 18 and 19) can be used with multiple light sources, but LG presented no evidence that would establish that fact by clear and convincing evidence. At best, LG presented evidence that the Katoh ’331 Patent discloses the use of multiple light sources with other embodiments that could be combined with “Embodiment 3.” However, “differences between the prior art reference and a claimed invention, however slight, invoke the question of obviousness, not anticipation.” *NetMoneyIN*, 545 F.3d at 1371. Accordingly, the ALJ finds that LG has failed to prove by clear and convincing evidence that the Katoh ’331 Patent anticipates claims 6 and 10.

### **3. Yao ’892 Publication**

U.S. Patent Application Publication No. 2003/0107892 to Yao (“Yao ’892 Publication”) was filed on April 17, 2002 and published on June 12, 2003, which is before the July 17, 2003 priority date for the ’932 Patent. (RX-0162C at Q&A 135; JX-0029.) Accordingly, the Yao ’892 Publication constitutes prior art under 35 U.S.C. § 102(a).

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LG contends that the Yao '892 Publication anticipates all of the asserted claims of the '932 Patent under both ITRI's and LG's constructions for "structured arc sheet." (RIB at 43-46.)

ITRI argues that the Yao '892 Publication does not disclose the "two structured arc sheets..." limitation and therefore, does not anticipate. (CRB at 22.)

Staff submits that there is clear and convincing evidence demonstrates that, under ITRI's construction, all of the asserted claims are anticipated by the Yao '892 Publication. (SIB at 49-50.)

The ALJ finds that, as set forth below, LG has shown by clear and convincing evidence that Yao anticipates the asserted claims of the '932 Patent.

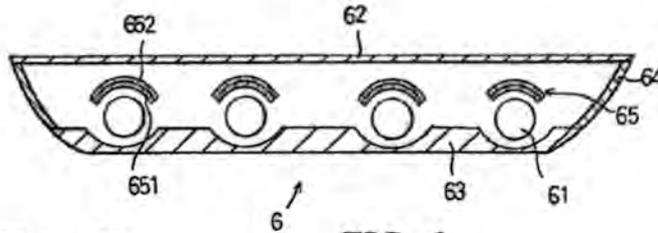
***Claim 6 — Preamble***

The preamble of claim 6 recites "an apparatus for improving uniformity used in a backlight module." While the preamble is not necessarily a limitation, if the Commission does consider it a limitation, the ALJ finds that LG has shown that the Yao '892 Publication discloses this limitation, teaching that the "present invention relates to ... a lamp reflecting apparatus used in a direct under type backlight module of liquid crystal display device" that "increases[s] light uniformity." (JX-0029 at ¶ [0002]; RX-0162C at Q&A 135.) Moreover, ITRI does not dispute that this claim limitation is met.

***Claim 6 — Plurality of Light Sources***

Claim 6 then requires "a plurality of light sources for providing an illuminating light." The ALJ finds that clear and convincing evidence that the Yao '892 Publication teaches this limitation. For example, this limitation is disclosed by Figure 6 of Yao '892 and its associated

description, which shows and describes light sources 61 for providing illuminating light. (JX-0029; RX-0162C at Q&A 136.) Moreover, ITRI does not dispute that this limitation is met.



(JX-0029 at Figure 6.)

FIG. 6

**Claim 6 — Reflective Housing**

Claim 6 further requires “a reflective housing adjacent to the light sources for receiving the light sources and reflecting the illuminating light.” The ALJ finds that LG has proven by clear and convincing evidence that this limitation is shown as items 63 and 64 in Figure 6, above, referred to as a “reflecting plate” and “lateral reflecting plates,” respectively. (RX-0162C at Q&A 137.) As explained in the Yao ’892 Publication at paragraph [0029], these reflecting plates, adjacent to the light sources, receive and reflect the illuminating light. (JX-0029 at ¶ [0029].) Moreover, ITRI does not dispute that this limitation is met.

**Claim 6 — “Two Structured Arc Sheets . . .”**

Claim 6 also requires “two structured arc sheets mounted at the periphery of the light source for making the illuminating light uniform, wherein said structured arc sheets have different thickness or curvature.” There is no dispute that as shown Figure 6, each light source 61 has mounted at its periphery, a component called by the Yao ’892 Patent the “lamp reflecting cover.” There is also no dispute that the lamp reflecting cover consists of two separate layers, each formed in the shape of an arc – layer 651 called the “reflecting layer” and layer 652 called the “light impassable layer” (shown in yellow below). (JX-0029 at ¶ [0029]; RX-0162C at Q&A 138.)

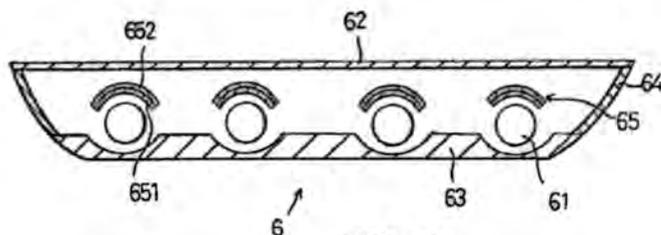


FIG. 6

(JX-0029 at Figure 6; ¶ [0029].)

There is also no dispute that Yao '892 Publication explains that the “lamp reflecting cover 65” focuses or reflects light emitted upwards from the lamp 61 to the reflecting plate 63. (JX-0029 at ¶ [0029].) Finally, there is no dispute that as shown in Figure 6 of the Yao '892 Publication, the light impassable layer 652 is layered over the reflecting layer 651. (JX-0029 at ¶ [0029].)

ITRI's arguments are somewhat muddled, but the ALJ finds that the principal dispute between the parties is whether the two layers 651 and 652 in Figure 6 of the Yao '892 Publication each constitute a separate structured arc sheet or whether they can only be considered together as one unit. (CIB at 43.) Specifically, ITRI asserts that the Yao '892 Publication “discloses a single member, called a ‘lamp reflecting cover,’ that is not structured and is comprised of two layers.” (CIB at 43.) ITRI argues that “[t]he light impassable layer 652 supports and creates one unified structure 65 with the reflective layer 651 and has no separate optical function.” (CIB at 43.) In other words, ITRI argues that the layers that make up, one component, the “lamp reflecting cover” and they cannot be considered separate “structured arc sheets.”

The ALJ finds this argument unpersuasive. As Staff notes, ITRI's expert admitted that “structured arc sheets, when mounted one on top of the other, may be bonded or adhesively attached.” (SIB at 49 (quoting Tr. at 571:23-573:23).) ITRI cannot treat the claims as a “nose of

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wax” arguing that particular configurations infringe, but then arguing that the same configuration cannot anticipate. Thus, as ITRI’s own expert admits that two structured arc sheets may be attached together into one unit, the ALJ rejects ITRI’s argument and finds that layers 651 and 652 are not a single structure and can be separate “structured arc sheets.”

ITRI appears to raise a second argument that regardless of whether the two layers can be considered separately, the “light impassable layer 652” cannot be a structured arc sheet. Specifically, ITRI contends that the “light impassable layer 652” is not “for making the illuminating light more uniform,” but rather it is for blocking light, “which is the opposite of what Claim 6 seeks to achieve.” (CIB at 44.) ITRI also relies on the testimony of Dr. Silzars where he states that “a light impassable layer is not a structured arc sheet by the definition of the ’932 Patent. The ’932 Patent describes four possible conditions. It’s either reflective, it’s transmissive, it’s semi-reflective or semi-transmissive. A light-blocking layer does not qualify to any of those, so it is not a structured arc sheet.” (CRB at 22 (quoting Tr. 566:14-567:1.) ITRI argues that “such a layer is not for ‘altering the pathway of illuminating light in multiple directions’ as required by ITRI’s proposed construction...” (CRB at 22.)

As an initial matter, the ALJ notes that this argument appears to rest, at least in part, on ITRI’s construction of the term “structured arc sheets,” which was rejected by the ALJ. Even assuming that this argument still applies, the ALJ finds that it is simply another attempt by ITRI to read additional limitations into the claim to avoid anticipation. As the Staff correctly notes, LG’s expert noted that neither construction imposes any express restriction regarding reflection, refraction, or absorption of light. (Tr. 532:15-533:7.) The ALJ agrees with Staff and LG that the claims have no such restriction. Not only is there no such limitation in the claims, the specification does not support such a limitation either. The ALJ finds that Dr. Silzars is incorrect

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that the '932 Patent describes only four possible conditions for making light uniform. Instead, the ALJ agrees with Staff that this is only a preferred embodiment of the invention and not a requirement. (See JX-0003 at 2:2-5 (“The structured arc sheet of the present invention is *preferably made* of total reflection, transparent, or semi-reflection and semi-transparent materials.) In addition, the ALJ notes that the “light impassible layer 652” is intended to make the illuminating light more uniform. As the specification of the Yao '892 Publication makes clear, the entire purpose of the “lamp reflecting cover” is to make the illuminating light uniform. (See JX-0003 at ¶¶ [0008], [0027], [0032].) Accordingly, the ALJ finds that this argument also does not prevent the “light impassible layer 652” from being a structured arc sheet.

ITRI also raises several minor arguments that can be easily dismissed. First, ITRI argues that “the layers 651 and 652 do not have meaningfully different curvatures.” (CIB at 43.) The ALJ finds this argument is merely an attempt to read a minimum curvature limitation into the claims that does not exist in the claims, or for that matter, the specification or prosecution history. As the Federal Circuit instructed, “[n]o principle of law ... authorize [s] ... read[ing] into a claim an element which is not present, for the purpose of making out a case of novelty ....” *E.I. DuPont de Nemours & Co. v. Phillips Petroleum Co.*, 849 F.2d 1430, 1433 (Fed. Cir. 1988) (quoting *McCarty v. Lehigh Valley R. Co.*, 160 U.S. 110, 116 (1895)). Moreover, this contention is directly contradicted by Dr. Silzars’s own testimony. Dr. Silzars repeatedly testified that there is no restriction regarding size of the arc. (Tr. 286:22-287:2; 571:25-572:11.) Indeed, in his infringement analysis, Dr. Silzars used a microscope to measure the thickness of the alleged “structured arc sheets” in the accused products and determined that a difference as small as 0.0015 inches in thickness of the sheets was sufficient to satisfy the claim. (CX-0350C at Q&A 142.) If ITRI believes that such tiny differences in thickness are sufficient for infringement, the

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ALJ declines read a “meaningfully different” curvature or thickness requirement into the claims. The ALJ finds that there is no dispute that layers 651 and 652 have different radii and that they have different curvatures, even if these differences are very small. (RX-0162C at Q&A 138.) This is sufficient to satisfy the claims.

Second, ITRI repeatedly argues, without much explanation, that the sheets are not “structured” or lack “structure” and cannot be “structured arc sheets.” In particular, ITRI asserts “[t]he embodiments of Figures 3 and 4 show that the reflecting layer in those embodiments is formed directly on the lamp bulb itself and needs no supporting structure as do the embodiments of Figures 5-7.” (CIB at 43.) ITRI also asserts that “there is no disclosure that layers 651 or 652 are both structured as required by claim 6.” (CRB at 22.) ITRI provides no details as to the parameters of its “structure” requirement, so we are left to guess as to exactly what that means. While the term “structured” certainly appears in the claim, it is not clear that it imposes the limitation that ITRI seeks to read into the claim.

The ALJ certainly does not see a “structure” requirement in either construction proposed by the parties. ITRI’s definition only requires that the sheet “contain arc-like structures” and LG’s definition only requires that the sheet be “constructed in the shape of arc.” The embodiment in Figure 6 easily meets those definitions. The ALJ declines ITRI’s attempt to read an additional limitation into the claims to preserve their validity.

The ALJ can only guess at the exact contours of this argument because ITRI did not provide much explanation and Dr. Silzars’s testimony on this point was not particularly illuminating (Tr. 167:4-170:9). Nevertheless, the ALJ finds this argument fails when examining Figure 6 of the Yao ’892 Publication, which is what LG points to as invalidating. As Figure 6 (and related Figures 5, 7, and 8) shows, the lamp reflecting cover 65 is a separate

structure. Figure 6 further shows that the structure is physically divided into two-layers, each comprising half the thickness of the structure. If this does not constitute structure, the ALJ is uncertain what would. The ALJ believes that ITRI's efforts to point to Figures 3 and 4 and attempt to obscure the the disclosure in Figure 5-8 is disingenuous because ITRI criticized LG for doing a similar thing with respect to the Katoh '331 Patent. Thus, the ALJ rejects all of ITRI's arguments that the Yao '892 Publication discloses structured arc sheets within the meaning of the claim.

Thus, the ALJ finds that ITRI offers no credible argument that Yao fails to disclose "structured arc sheets" and the Yao '892 Publication meets this limitation claim 6 of the '932 Patent. (RX-0162C at Q&A 138.)

Because the Yao '892 Publication discloses all of the elements of claim 6 of the '932 Patent, the ALJ finds that Yao '892 Publication anticipates

***Yao '892 Publication Anticipates claim 9***

Claim 9 of the '932 Patent depends from claim 6 and requires the additional limitation that "the apparatus is used in a liquid crystal display." There is no dispute that Yao '892 teaches in paragraph [0002] that its disclosure can be used in a "backlight module of a liquid crystal display device." (JX-0029 at ¶ [0002]; RX-0162C at Q&A 139.) Thus, the ALJ finds that claim 9 of the '932 Patent is also anticipated by the Yao '892 Publication.

***Yao '892 Publication Anticipates claim 10***

Claim 10 of the '932 Patent depends from claim 6 and requires the additional limitation that "the two structured arc sheets are not in the same plane." ITRI argues that the Yao '892 Publication does not teach this limitation for two reasons. First, ITRI reiterates its argument with respect to claim 6 that "Yao teaches a single structure and therefore cannot be

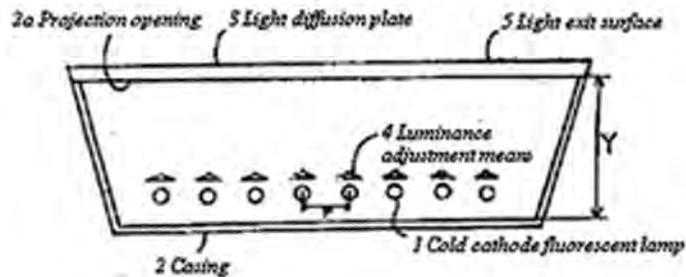
taken as two layers in different planes.” (CIB at 44.) As discussed above, the ALJ has rejected that Yao only teaches a single structure and not two structured arc sheets with respect to claim 6 and for the same reasons rejects it with respect to claim 10. ITRI further argues that with respect to claim 10 that “the difference in position between the two layers is so insignificant that they cannot be regarded as in different planes.” (CIB at 44.) This appears merely to be a rehashing of its argument that the difference in curvature must be substantial. However, the ALJ finds that as shown in Figure 6 above of the Yao ’892 Publication, the light impassable layer 652 is layered over the reflecting layer 651. Accordingly, the Yao ’892 Publication discloses that two structured arc sheets are not in the same plane. (JX-0029 at Figure 6; RX-0162C at Q&A 140.)

Thus, the ALJ finds that claim 10 of the ’932 Patent is also anticipated by the Yao ’892 Publication.

#### 4. Azuma

Japanese Patent Publication 2000-338895 to Azuma (“Azuma”) was published on December 8, 2000, which is more than one year prior to the July 17, 2003 priority date of the ’932 Patent. (JX-0047.) Thus, Azuma is prior art under 35 U.S.C. § 102(b).

LG contends that Azuma anticipates claim 6 of under both LG’s construction for “structured arc sheets” as well as ITRI’s proposal. (RIB at 46-47.) The backlight module from Azuma is shown below:



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(JX-0047, Figure 1.) LG contends that the “luminance adjustment means 4” is shown in Figure 5(c) as being constructed in the shape of an arc. (RIB at 46.)

ITRI argues that Azuma does not disclose “two structured arc sheets mounted at the periphery of the light source.” (CIB at 47.) ITRI contends that Azuma instead discloses “one sheet over each light source, and that it may be curved or not. (CIB at 47.)

Staff submits that the evidence fails to show that independent claim 6 and dependent claim 9 are anticipated by Azuma. (SIB at 55.) Staff argues that the evidence shows that Azuma only discloses one “structured arc sheet,” not “two structured arc sheets” as required by the claims. (SIB at 55.)

As an initial matter, the ALJ finds that LG failed to preserve its arguments that Azuma anticipates claims 9 and 10 of the '932 Patent. Those arguments were not raised in its pre-hearing brief. (RPHB at 152-156.) Accordingly, the ALJ finds that under Ground Rule 8, LG has waived its arguments that Azuma anticipates claims 9 and 10 of the '932 Patent.

The ALJ further finds that LG has failed to show by clear and convincing evidence that Azuma discloses each and every limitation of claim 6 of the '932 Patent. The ALJ finds that LG's analysis fails to address each and every limitation of the '932 Patent in its initial post-hearing brief. Rather, LG cites to its expert's testimony for a detailed claim by claim analysis. This is, quite simply, nothing more than an improper attempt to circumvent the page limitations set by the ALJ for post-hearing briefs. *See Certain Mobile Devices, Associated Software and Components Thereof*, Inv. No. 337-TA-744, Final Initial Determination, at 117 (December 20, 2011) (unreviewed in relevant part). In the ALJ's view, merely referencing the testimony of a party's expert and incorporating that testimony or analysis by reference not only fails to constitute “a discussion” of the issue in the post-hearing brief as required by the Ground Rules,

but is insufficient to carry a party's burden of proof. The ALJ therefore finds that LG has failed to show by clear and convincing evidence that Azuma practice each and every limitation of any of the asserted claims, and therefore, Azuma does not anticipate claim 6 of the '932 Patent.

**5. Nishio '332 Patent**

U.S. Patent No. 5,592,332 to Nishio ("Nishio '332 Patent") issued on January 7, 1997, which is more than one year before the July 17, 2003 priority date of the '932 Patent. (JX-0034; RX-0162C at Q&A 179-182.) Thus, the Nishio '332 Patent is prior art under 35 U.S.C. § 102(b).

LG contends that if ITRI's construction for "structured arc sheets" is adopted then the Nishio '332 Patent renders the '932 Patent invalid as anticipated. (RIB at 47-50.)

ITRI argues that the Nishio '332 Patent does not disclose "two structured arc sheets." (CIB at 46.)

Staff argues that the Nishio '332 Patent discloses "two structured arc sheets" as required by the asserted claims under ITRI's construction of "structured arc sheets" and thus anticipates the asserted claims under ITRI's construction. (SIB at 54.) Staff does not contend that the Nishio '332 Patent anticipates under LG's and Staff's construction of the term "structured arc sheets."

The ALJ finds that because the ALJ rejected ITRI's construction for structured arc sheet and no party contends that the Nishio '332 Patent anticipates under the construction the ALJ adopted, the Nishio '332 Patent does not anticipate the asserted claims of the '932 Patent.

**6. Yokota '907 Patent**

U.S. Patent No. 5,552,907 to Yokota ("Yokota '907 Patent") issued on September 3, 1996, which is more than one year before the July 17, 2003 priority date of the '932 Patent. (JX-

0033; RX-0162C at Q&A 150-158.) Thus, the Yokota '907 Patent is prior art under 35 U.S.C. § 102(b).

LG contends that if ITRI's construction for "structured arc sheets" is adopted then the Yokota '907 Patent renders the '932 Patent invalid as anticipated. (RIB at 50-53.)

ITRI argues that Yokota '907 Patent does not disclose "two structured arc sheets" and a "reflective housing." (CIB at 45.)

Staff argues that the Yokota '907 Patent discloses "two structured arc sheets" as required by the asserted claims under ITRI's construction of "structured arc sheets" and thus anticipates the asserted claims under ITRI's construction. (SIB at 52-53.) Staff does not contend that the Yokota '907 Patent anticipates under LG's and Staff's construction of the term "structured arc sheets."

The ALJ finds that because the ALJ rejected ITRI's construction for structured arc sheet and no party contends that the Yokota '907 Patent anticipates under the construction the ALJ adopted, the Yokota '907 Patent does not anticipate the asserted claims of the '932 Patent.

#### **7. McCartney '371 Patent**

U.S. Patent No. 5,280,371 to McCartney ("McCartney '371 Patent") issued on January 18, 1994, which is more than one year before the July 17, 2003 priority date of the '932 Patent. (JX-0032.) Thus, the McCartney '371 Patent is prior art under 35 U.S.C. § 102(b).

LG contends that if ITRI's construction for "structured arc sheets" is adopted then the McCartney '371 Patent renders the '932 Patent invalid as anticipated. (RIB at 53-54.)

ITRI argues that LG improperly raises the McCartney '371 Patent for the first time in its post-hearing brief and that McCartney '371 Patent does not disclose a "reflective housing adjacent to the light sources." (CRB at 26.)

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Staff argues that LG failed to raise the McCartney '371 Patent in its pre-hearing brief and thus, waived the argument. (SRB at 24 n.17.) Staff further argues LG has failed to provide any evidence (in the form of expert testimony) that the McCartney '371 Patent anticipates the asserted claims. (SIB at 24 n.17.)

The ALJ finds that LG failed to raise the argument that the McCartney '371 Patent anticipates the asserted claims of the '932 Patent in its pre-hearing brief. Thus, the ALJ deems these arguments waived. (*See* Ground Rule 8.)

**8. Zimmerman '281 Patent**

U.S. Patent No. 5,598,281 to Zimmerman (“Zimmerman '281 Patent”) issued on January 28, 1997, which is more than one year before the July 17, 2003 priority date of the '932 Patent. (JX-0035; RX-0162C at Q&A 141-143.) Thus, the Zimmerman '281 Patent is prior art under 35 U.S.C. § 102(b).

LG contends that if ITRI’s construction for “structured arc sheets” is adopted then the Zimmerman '281 Patent renders the '932 Patent invalid as anticipated. (RIB at 56-57.)

ITRI argues that Zimmerman'281 Patent does not disclose “two structured arc sheets” and a “reflective housing.” (CIB at 44.)

Staff argues that the Zimmerman '281 Patent discloses “two structured arc sheets” as required by the asserted claims under ITRI’s construction of “structured arc sheets” and thus anticipates the asserted claims under ITRI’s construction. (SIB at 50-52.) Staff does not contend that the Zimmerman '281 Patent anticipates under LG’s and Staff’s construction of the term “structured arc sheets.”

The ALJ finds that because the ALJ rejected ITRI’s construction for structured arc sheet and no party contends that the Zimmerman '281 Patent anticipates under the construction the

ALJ adopted, the Zimmerman '281 Patent does not anticipate the asserted claims of the '932 Patent.

**9. Hua-Nan '873 Patent**

U.S. Patent No. 6,989,873 to Hua-Nan (“Hua-Nan '873 Patent”) was filed March 18, 2004, published on September 23, 2004, issued on January 24, 2006, and claims priority to a Taiwanese patent application filed March 19, 2003.<sup>4</sup> (JX-0041; RX-0162C at Q&A 159-162.)

LG contends that if ITRI’s construction for “structured arc sheets” is adopted then the Hua-Nan '873 Patent renders the '932 Patent invalid as anticipated. (RIB at 56-57.)

ITRI argues that Hua-Nan '873 Patent does not disclose “two structured arc sheets” and a “reflective housing.” (CIB at 45.)

Staff argues that LG has failed to prove that the Hua-Nan '873 Patent discloses “two structured arc sheets” as required by the asserted claims. (SIB at 53.)

The ALJ finds that because the ALJ rejected ITRI’s construction for “structured arc sheet” and no party contends that the Hua-Nan '873 Patent anticipates under the construction the ALJ adopted, the Hua-Nan '873 Patent does not anticipate the asserted claims of the '932 Patent.

**10. Cho '633 Patent**

U.S. Patent No. 6,700,633 to Cho (“Cho '633 Patent”) was filed December 31, 2001 and published July 3, 2003. (JX-0040; RX-0162C at Q&A 169-172.) This is before the July 17,

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<sup>4</sup> It does not appear that this reference is prior art. Because the date of publication is after the priority date, the only categories of prior art that the Hua-Nan '873 Patent could possibly fall into are 102(e) or 102(g)(2). Moreover, even under these categories, the Hua-Nan '873 Patent can be prior art only if the effective date for this reference for prior art purposes is the foreign filing date. However, the law is clear that the effective date for prior art purposes of a U.S. application claiming priority to a foreign application for 102(e) and 102(g) purposes is the U.S. filing date. See *In re Hilmer*, 359 F.2d 859 (C.C.P.A. 1966) (holding U.S. filing date applies for 102(e) purposes for applications claiming priority to a foreign application under § 119); *In re Hilmer*, 424 F.2d 1108 (C.C.P.A. 1970) (holding U.S. filing date applies for 102(g)(2) purposes). There is an exception in § 102(e) for applications filed under the Patent Cooperation Treaty, but that exception does not apply here. None of the parties raised this issue and because the ALJ finds that in any event, it does not anticipate the asserted claims, the ALJ declines to decide the issue *sua sponte*.

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2003 priority date of the '932 Patent. (RX-0169C at Q&A 169-172.) Thus, the Cho '633 Patent is prior art under 35 U.S.C. § 102(a).

LG contends that if ITRI's construction for "structured arc sheets" is adopted then the Cho '633 Patent renders the '932 Patent invalid as anticipated. (RIB at 57-58.)

ITRI argues that Cho '633 Patent does not disclose "two structured arc sheets" because the "light control members 230" and "light guiding plate 220" do not contain arc-like structures. (CIB at 46.)

Staff argues that LG has failed to prove that the Cho '633 Patent discloses "two structured arc sheets" as required by the asserted claims. (SIB at 46.) Staff does not contend that the Cho '633 Patent anticipates under LG's and Staff's construction of the term "structured arc sheets."

The ALJ finds that because the ALJ rejected ITRI's construction for structured arc sheet and no party contends that the Cho '633 Patent anticipates under the construction the ALJ adopted, the Cho '633 Patent does not anticipate the asserted claims of the '932 Patent.

**11. Tachibana**

Japanese patent publication H06-250023 to Tachibana ("Tachibana") published on September 9, 1994, which is more than one year prior to the July 17, 2003 priority date of the '932 Patent. (JX-0048; RX-0162C at Q&A 208-210.) The ALJ finds that Tachibana is prior art to the '932 Patent under 35 U.S.C. § 102(b).

LG contends that Tachibana anticipates the asserted claims of the '932 Patent under the claim construction that ITRI offered for "structured arc sheet," but not under LG's and Staff's construction for "structured arc sheet." (CIB at 58-59.)

ITRI argues that Tachibana does not disclose "two structured arc sheets." (CIB at 47; CRB at 29.)

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Staff submits that under ITRI's claim construction, all of the asserted claims of the '932 Patent are anticipated by Tachibana. (SIB at 56.) Staff does not contend that the Tachibana anticipates under LG's and Staff's construction of the term "structured arc sheets."

The ALJ finds that because the ALJ rejected ITRI's construction for "structured arc sheet" and no party contends that Tachibana anticipates under the construction the ALJ adopted, Tachibana does not anticipate the asserted claims of the '932 Patent.

**12. Nakamura Japanese Patent**

Japanese Patent H08-160418 to Nakamura ("Nakamura Japanese Patent") published on June 21, 1996, which is more than one year prior to the July 17, 2003 foreign application priority date of the '932 Patent. (JX-0043; RX-0162C at Q&A 189-191.) Accordingly, it is prior art under 35 U.S.C. § 102(b).

LG contends that the Nakamura Japanese Patent anticipates the asserted claims of the '932 Patent, but only under ITRI's construction of structured arc sheet. (RIB at 59-60.)

ITRI contends that the Nakamura Japanese Patent does not disclose "two structured arc sheets" even under its construction and that this reference also does not disclose a "reflective housing." (CIB at 46.)

Staff agrees with LG that Nakamura anticipates the asserted claims under ITRI's proposed construction. (SIB at 54-55; SRB at 22-23.) Staff does not contend that the Nakamura Japanese Patent anticipates under LG's and Staff's construction of the term "structured arc sheets."

The ALJ finds that because the ALJ rejected ITRI's construction for "structured arc sheet" and no party contends that the Nakamura Japanese Patent anticipates under the construction the ALJ adopted, Nakamura Japanese Patent does not anticipate the asserted claims of the '932 Patent.

## B. Obviousness

Included within the presumption of validity is a presumption of non-obviousness. *Structural Rubber Prods. Co. v. Park Rubber Co.*, 749 F.2d 707, 714 (Fed. Cir. 1984).

Obviousness is grounded in 35 U.S.C. § 103, which provide, *inter alia*, that:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negative by the manner in which the invention was made.

35 U.S.C. § 103(a). Under 35 U.S.C. § 103(a), a patent is valid unless “the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.” 35 U.S.C. § 103(a). The ultimate question of obviousness is a question of law, but “it is well understood that there are factual issues underlying the ultimate obviousness decision.” *Richardson-Vicks Inc.*, 122 F.3d at 1479; *Wang Lab., Inc. v. Toshiba Corp.*, 993 F.2d 858, 863 (Fed. Cir. 1993).

Obviousness is a question of law based on underlying facts, as set forth in *Graham v. John Deere Co.*, 383 U.S. 1 (1966). “The Graham factors are (1) the scope and content of the prior art, (2) the difference between the prior art and the claimed invention, (3) the level of ordinary skill in the field of the invention, and (4) any relevant objective considerations.” *Soverain Software LLC v. NewEgg, Inc.*, --- F.3d ----, 2013 WL 216406, at \*2 (Fed. Cir. January 22, 2013). “The Graham Court explained that ‘the ultimate question of patent validity is one of law.’” *Id.* (citing *Graham*, 383 U.S. at at 17).

“Generally, a party seeking to invalidate a patent as obvious must demonstrate ‘by clear and convincing evidence that a skilled artisan would have been motivated to combine the

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teaching of the prior art references to achieve the claimed invention, and that the skilled artisan would have had a reasonable expectation of success in doing so.”” *OSRAM Sylvania, Inc. v. Am. Induction Techs., Inc.*, 701 F.3d 698, 706-707 (Fed. Cir. 2012) (quoting *Pfizer, Inc. v. Apotex, Inc.*, 480 F.3d 1348, 1361 (Fed. Cir. 2007)); *see also Amgen, Inc. v. F. Hoffman–LA Roche Ltd.*, 580 F.3d 1340, 1362 (Fed. Cir. 2009) (“An obviousness determination requires that a skilled artisan would have perceived a reasonable expectation of success in making the invention in light of the prior art.” (citations omitted)). “The Supreme Court has warned, however, that, while an analysis of any teaching, suggestion, or motivation to combine known elements is useful to an obviousness analysis, the overall obviousness inquiry must be expansive and flexible.” *OSRAM*, 701 F.3d at 707.

Obviousness may be based on any of the alleged prior art references or a combination of the same, and what a person of ordinary skill in the art would understand based on his knowledge and said references. If all of the elements of an invention are found, then:

a proper analysis under § 103 requires, inter alia, consideration of two factors: (1) whether the prior art would have suggested to those of ordinary skill in the art that they should make the claimed composition or device, or carry out the claimed process; and (2) whether the prior art would also have revealed that in so making or carrying out, those of ordinary skill would have a reasonable expectation of success. *Both the suggestion and the reasonable expectation of success must be founded in the prior art, not in the applicant's disclosure.*

*Velander v. Garner*, 348 F.3d 1359, 1363 (Fed. Cir. 2003) (emphasis added) (internal citations omitted).

The critical inquiry in determining the differences between the claimed invention and the prior art is whether there is a reason to combine the prior art references. *See C.R. Bard v. M3 Sys.*, 157 F.3d 1340, 1352 (Fed. Cir. 1998). For example:

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*[A] patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art. Although common sense directs one to look with care at a patent application that claims as innovation the combination of two known devices according to their established functions, it can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does. This is so because inventions in most, if not all, instances rely upon building blocks long since uncovered, and claimed discoveries almost of necessity will be combinations of what, in some sense, is already known.*

*KSR Int'l Co. v. Teleflex, Inc.*, 550 U.S. 398, 418-19 (2007) (emphasis added). The Federal Circuit case law previously required that, in order to prove obviousness, the patent challenger must demonstrate, by clear and convincing evidence, that there is a “teaching, suggestion, or motivation to combine. The Supreme Court has rejected this “rigid approach” employed by the Federal Circuit in *KSR Int'l Co. v. Teleflex Inc.*, 500 U.S. 398, 415 (2007). The Supreme Court stated:

When a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one. If a person of ordinary skill can implement a predictable variation, § 103 likely bars its patentability. For the same reason, if a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill. *Sakraida* and *Anderson's-Black Rock* are illustrative—a court must ask whether the improvement is more than the predictable use of prior art elements according to their established function.

Following these principles may be more difficult in other cases than it is here because the claimed subject matter may involve more than the simple substitution of one known element for another or the mere application of a known technique to a piece of prior art ready for the improvement. Often, it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue. To facilitate review, this analysis should be made explicitly. See *In re Kahn*, 441 F.3d 977, 988 (CA Fed. 2006) (“[R]ejections on obviousness grounds cannot be sustained by mere

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conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusions of obviousness”). As our precedents make clear, however, the analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.

[ . . . ]

The obviousness analysis cannot be confined by a formalistic conception of the words teaching, suggestion, and motivation, or by overemphasis on the importance of published articles and the explicit content of issued patents. The diversity of inventive pursuits and of modern technology counsels against limiting the analysis in this way. In many fields it may be that there is little discussion of obvious techniques or combinations, and it often may be the case that market demand, rather than scientific literature, will drive design trends. Granting patent protection to advance that would occur in the ordinary course without real innovation retards progress and may, in the case of patents combining previously known elements, deprive prior inventions of their value or utility.

*KSR*, 550 U.S. at 417-419. The Federal Circuit has harmonized the *KSR* opinion with many prior circuit court opinions by holding that when a patent challenger contends that a patent is invalid for obviousness based on a combination of prior art references, “the burden falls on the patent challenger to show by clear and convincing evidence that a person of ordinary skill in the art would have had reason to attempt to make the composition or device, or carry out the claimed process, and would have had a reasonable expectation of success in doing so.” *PharmaStem Therapeutics, Inc. v. ViaCell, Inc.*, 491 F.3d 1342, 1360 (Fed. Cir. 2007)(citing *Medichem S.A. v. Rolabo S.L.*, 437 F.3d 1175, 1164 (Fed. Cir. 2006)); *Noelle v. Lederman*, 355 F.3d 1343, 1351-52 (Fed. Cir. 2004); *Brown & Williamson Tobacco Corp. v. Philip Morris, Inc.*, 229 F.3d 1120, 1121 (Fed. Cir. 2000) and *KSR*, 550 U.S. at 416 (“a combination of elements ‘must do more than yield a predictable result’; combining elements that work together ‘in an unexpected and fruitful manner’ would not have been obvious”). Further, a suggestion to combine need not be express

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and may come from the prior art, as filtered through the knowledge of one skilled in the art. *See Certain Lens-Fitted Film Pkgs.*, Inv. No. 337-TA-406, Order No. 141 at 6 (May 24, 2005).

“Secondary considerations,” also referred to as “objective evidence of non-obviousness,” must be considered in evaluating the obviousness of a claimed invention, but the existence of such evidence does not control the obviousness determination. *Graham*, 383 U.S. at 17-18. A court must consider all of the evidence under the *Graham* factors before reaching a decision on obviousness. *Richardson-Vicks Inc.*, 122 F.3d at 1483-84. Objective evidence of non-obviousness may include evidence of the commercial success of the invention, long felt but unsolved needs, failure of others, copying by others, teaching away, and professional acclaim. *See Perkin-Elmer Corp. v. Computervision Corp.*, 732 F.2d 888, 894 (Fed. Cir. 1984), *cert. denied*, 469 U.S. 857 (1984); *Avia Group Int'l, Inc. v. L.A. Gear California*, 853 F.2d 1557, 1564 (Fed. Cir. 1988); *In re Hedges*, 783 F.2d 1038, 1041 (Fed. Cir. 1986); *Kloster Speedsteel AB v. Crucible Inc.*, 793 F.2d 1565 (Fed. Cir. 1986), *cert. denied*, 479 U.S. 1034 (1987). The burden of showing secondary considerations is on the patentee and, in order to accord objective evidence substantial weight, a patentee must establish a nexus between the evidence and the merits of the claimed invention; a *prima facie* case is generally set forth “when the patentee shows both that there is commercial success, and that the thing (product or method) that is commercially successful is the invention disclosed and claimed in the patent.” *In re GPAC Inc.*, 57 F.3d 1573, 1580 (Fed. Cir. 1995); *Demaco Corp. v. F. Von Langsdorff Licensing Ltd.*, 851 F.2d 1387, 1392 (Fed. Cir. 1988), *cert. denied*, 488 U.S. 956 (1988); *Certain Crystalline Cefadroxil Monohydrate*, Inv. No. 337-TA-293, Comm’n Op. (March 15, 1990). Once a patentee establishes nexus, the burden shifts back to the challenger to show that, *e.g.*,

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commercial success was caused by “extraneous factors other than the patented invention, such as advertising, superior workmanship, etc.” (*Id.*) at 1393.

Generally, a prior art reference that teaches away from the claimed invention does not create *prima facie* case of obviousness. *In re Gurley*, 27 551, 553 (Fed. Cir. 1994; *Certain Rubber Antidegradants*, Inv. No. 337-TA-533 (Remand), Final ID (Dec. 3, 2008) (stating, “KSR reaffirms that obviousness is negated when the prior art teaches away from the invention.”)). However, the nature of the teaching is highly relevant. *Id.* “A reference may be said to *teach away* when a person of ordinary skill, upon reading the reference, would be *discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant.*” *Id.* (emphasis added). For example, “a reference will teach away if it suggests that the line of development flowing from the reference's disclosure is unlikely to be productive of the result sought by the applicant.” *Id.*

The Federal Circuit has recently explained, moreover, that the obviousness inquiry requires examination of all four Graham factors. *E.g., Mintz v. Dietz & Watson, Inc.*, 679 F.3d 1372, 1375 (Fed. Cir. 2012). Indeed, courts must consider all of the Graham factors prior to reaching a conclusion with respect to obviousness. *In re Cyclobenzaprine Hydrochloride Extended-Release Capsule Patent Litig.*, 676 F.3d 1063, 1076–77 (Fed. Cir. 2012) (collecting cases). At all times, the burden is on the defendant to establish by clear and convincing evidence that the patent is obvious. *Id.* at 1077–78.

LG argues that “[i]n the event that the ALJ should find any of the limitations from claims 6, 9, and 10 missing from the [*sic.*] any of the anticipatory references discussed above, then any combination of those references renders obvious the asserted claims of the '932 Patent.” (RIB at 61.) LG builds on this catch-all argument with a reference to the Supreme Court's decision in

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*KSR* and the assertion that the “motivation to combine various prior art references discussed above can be found in at least (1) the problem known in the field of backlight modules of improving light uniformity[;] (2) common sense that in improving uniformity, one would look to prior art references that accomplished the same goal, and (3) essentially all the prior art references were directed to backlight modules—which are the exact modules at issue in the case.” (RIB at 61.)

This contention is insufficient to prove obviousness by clear and convincing evidence and does not meet the Ground Rules requirement that the post-hearing briefs set for the parties’ arguments fully. The ALJ has previously rejected attempts to argue obviousness by merely referring back to the anticipatory references and saying any of them could be combined to render the invention obvious. *See Certain Mobile Devices, Associated Software and Components Thereof*, Inv. No. 337-TA-744, Final Initial Determination, at 166 (December 20, 2011) (unreviewed in relevant part) (rejecting Motorola’s obviousness analysis that consisted of the assertion that the asserted patent was “obvious in light of the prior art calendar applications for desktop and laptop computers, which were readily adapted for use on mobile devices, such as the Newton MessagePad and Motorola Envoy.”). The ALJ finds LG’s analysis similarly lacking. LG has failed to provide an element-by-element analysis of the relevant combinations, has failed to provide any analysis of the *Graham* factors, and has not even identified what combinations would provide what missing elements from the references. Moreover, the ALJ finds LG’s proffered motivations to combine also lacking. Merely saying that the references are in a similar field and “common sense” would lead a person of ordinary skill to combine them is insufficient. *See Mintz v. Dietz & Watson, Inc.*, 679 F.3d 1372, 1377 (Fed. Cir. 2012) (“The mere recitation of the words ‘common sense’ without any support adds nothing to the obviousness equation.

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Within the statutory test to determine if a claimed invention has advanced its technical art field enough to warrant an exclusive right, ‘common sense’ is a shorthand label for knowledge so basic that it certainly lies within the skill set of an ordinary artisan. With little more than an invocation of the words ‘common sense’ (without any record support showing that this knowledge would reside in the ordinarily skilled artisan), the district court overreached in its determination of obviousness.” *TriMed, Inc. v. Stryker, Inc.*, 608 F.3d 1333, 1343 (Fed. Cir. 2010) (“Merely saying that an invention is a logical, commonsense solution to a known problem does not make it so.”).

LG also contends that “to the extent the ALJ should find any of the limitations from claims 6, 9, and 10 missing from the [*sic.*] any of the anticipatory references discussed above, then, for the same reasons discussed above regarding motivation to combine, such reference can be combined with any one of the obviousness references identified above [below?] to render obvious the asserted claims of the ‘932 Patent.” (RIB at 61-62.) LG then goes on to list twelve combinations of references, some of those combinations including three references, which LG contends render the claims obvious. LG does include some cursory discussion of the elements that LG contends are the only ones that ITRI argues are missing from some of the combinations. (RIB at 63-65.) However, the ALJ finds that this cursory discussion fails to meet LG’s burden of proving obviousness by clear and convincing evidence. While the ALJ notes that LG improved on its analysis for these references as compared to its contentions regarding the anticipatory references by at least listing the particular combinations it contends render the asserted claim obvious, these combinations suffer from a different flaw. For a number of references in these combinations, there is no discussion of the content of these references in LG’s post-hearing brief. Even for the references where there is some discussion (somewhere in LG’s post-hearing brief)

of the content of the references, the ALJ finds that there is no coherent, non-conclusory discussion of what elements the particular references supply and how the combination renders the asserted claims obvious. Moreover, LG's discussion of particular allegedly missing elements that LG contends are present is insufficient to meet the clear and convincing burden of proof. Finally, the ALJ further finds that LG offered no motivation to combine these references besides the three "motivations" it provided (discussed above) for why the anticipatory references could be combined. As the ALJ noted previously, those motivations are inadequate and fail to demonstrate why the asserted claims are obvious. Accordingly, the ALJ finds that LG has failed to prove by clear and convincing evidence that the asserted claims of the '932 Patent are obvious.

### **C. Lack of Written Description and Indefiniteness**

LG also contends that the asserted claims of the '932 Patent are also invalid under 35 U.S.C. § 112 ¶ 1, for failure to comply with the written description requirement. Specifically, LG argues that, with respect to the claim term "uniform," one of ordinary skill in the part would not know, based on the specification, that the inventor actually invented a display containing a backlight module that makes the "illuminating light more uniform." (RIB at 65-66.) LG also argues, in the alternative, that the claim term "uniform" is indefinite. LG asserts that ITRI attempts to save its claims by asserting that the specification discloses how to "enhance uniformity" or make the light "more uniform" as demonstrated in Figure 4 of the '932 Patent. (RRB at 21.) However, LG argues that this is improper because the claims require that the light be "uniform," not "more uniform." (RRB at 21.) LG asserts that Dr. Escuti testified that Figure 4 does not demonstrate that the illuminating light is "uniform" because it indicates variance which it characterizes as "non-uniformity." (RRB at 21-22.) LG contends, in other words, that

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Figure 4 of the '932 Patent demonstrate “improved uniformity,” but not light that is “uniform” as required by claim 6. (RRB at 22.)

ITRI argues that not only is LG’s reasoning faulty, it falls fall short of reaching LG’s burden of establishing invalidity by clear and convincing evidence. (CIB at 54.) ITRI contends that the patent discusses throughout the description that the aspirational goal of the invention to improve uniformity in addition to the disclosure in Figure 4. (CIB at 54.) ITRI also argues that Figure 4 does not purport to show a perfectly uniform illuminating light, but simply that the light is more uniform than without the invention which is shown in Figure 5. (CIB at 54.) ITRI notes that the patent explicitly says that Figure 4 shows “an enhanced uniformity of illuminating light.” (CIB at 54.) In addition, ITRI argues that its expert testified that the term “uniform” was understandable and supported by the specification. (CIB at 54.) ITRI also argues that the patent claims are not indefinite because they are susceptible to interpretation. (CIB at 54-55.)

Staff argues that the evidence shows that the '932 Patent is not invalid for failure to satisfy the written description requirement. (SIB at 57.) Staff argues that the term “uniform” is discussed throughout the '932 Patent. (SIB at 57.) Staff asserts that in particular, the '932 Patent discloses that the patentees used TracePro simulation software to carry out a simulation of the dispersion of light and that the results were presented in the patent specification. (SIB at 57.) Staff also argues that the term “uniform” is susceptible to construction and is, therefore, not indefinite. (SIB at 58.)

35 U.S.C. § 112, paragraph 1, requires “a written description of the invention.” *Ariad Pharm., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1344 (Fed. Cir. 2010) (en banc). “[I]f the claimed invention does not appear in the specification . . . the claim . . . fails regardless whether one of skill in the art could make or use the claimed invention.” *Id.* at 1348. “A claim will not

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be invalidated on section 112 grounds because the embodiments of the specification do not contain examples explicitly covering the full scope of the claim language.” *LizardTech, Inc. v. Earth Resource Mapping, Inc.*, 424 F.3d 1336, 1345 (Fed. Cir. 2005). The definiteness requirement seeks to “ensure that the claims delineate the scope of the invention using language that adequately notifies the public of the patentee's right to exclude.” *Datamize, LLC v. Plumtree Software, Inc.*, 417 F.3d 1342, 1347 (Fed. Cir. 2005). To do so does not require “absolute clarity” or precision in claim language; this court has ruled that claims are not invalid for indefiniteness unless they are “not amenable to construction” or “insolubly ambiguous.” *Id.* (quotation marks omitted). Overcoming the presumption of patent validity, therefore, demands clear and convincing evidence that “a skilled artisan could not discern the boundaries of the claim.” *Halliburton Energy Servs., Inc. v. M-I LLC*, 514 F.3d 1244, 1249 (Fed. Cir. 2008).

LG’s § 112 arguments appear to largely be a rehashing of its claim construction arguments regarding “uniform.” The ALJ finds that these fail for several reasons. First, the ALJ has found in his October 22, 2012 Final ID that “uniform” could be construed and gave the term its plain and ordinary meaning. Because the claim term has been found susceptible to construction, the ALJ finds that LG has failed to show by clear and convincing evidence that the claims are invalid as indefinite. *Halliburton Energy*, 514 F.3d at 1249. Second, LG’s written description arguments appear to be predicated on “uniform” requiring some absolute level of “uniformity” in order to be met. However, as the ALJ held in the October 22, 2012 ID, “the use of ‘uniform’ throughout the specification and the claims has a more qualitative use in the art.” (ID at 33-36.) With this understanding, the ALJ finds the disclosure in the specification to be more than adequate to demonstrate that the patentee had possession of the claimed invention.

Accordingly, the ALJ finds that LG's written description and indefiniteness are without merit and the patents are not invalid under Section 112.

### III. UNENFORCEABILITY

#### A. Applicable Law

"Inequitable conduct is an equitable defense to patent infringement that, if proved, bars enforcement of a patent." *Therasense, Inc. v. Becton, Dickinson & Co.*, 649 F.3d 1276, 1285 (Fed. Cir. 2011) (en banc). "To prove inequitable conduct, the challenger must show by clear and convincing evidence that the patent applicant (1) misrepresented or omitted information material to patentability, and (2) did so with specific intent to mislead or deceive the PTO." *In re Rosuvastatin Calcium Patent Litig.*, 703 F.3d 511, 519 (Fed. Cir. 2012) (citing *Therasense*, 649 F.3d at 1287). "Intent and materiality are separate requirements." *Therasense*, 694 F.3d at 1290 (citing *Hoffmann-La Roche, Inc. v. Promega Corp.*, 323 F.3d 1354, 1359 (Fed. Cir. 2003)). "[T]he materiality required to establish inequitable conduct is, in general, but-for materiality." *Am. Calcar, Inc. v. Am. Honda Motor Co.*, 651 F.3d 1318, 1334 (Fed. Cir. 2011) (citing *Therasense*, 649 F.3d at 1291). "When an applicant fails to disclose prior art to the PTO, that prior art is but-for material if the PTO would not have allowed a claim had it been aware of the undisclosed prior art." *Am. Calcar*, 651 F.3d at 1334 (citing *Therasense*, 649 F.3d at 1291).

"The court in *Therasense* sought to impart objectivity to the law of inequitable conduct by requiring that the 'the accused infringer must prove the patentee acted with the specific intent to deceive the PTO....'" *Rosuvastatin Calcium Patent Litig.*, 703 F.3d at 522 (quoting *Therasense*, 649 F.3d at 1290). "A finding that the misrepresentation or omission amount to gross negligence or negligence under a 'should have known' standard does not satisfy this intent requirement." *Therasense*, 649 F.3d at 1290 (citations omitted). "*Therasense* explained that in order to show that the patentee acted with the specific intent to deceive the PTO, a defendant

must prove ‘that the applicant knew of the reference, knew that it was material, and *made a deliberate decision to withhold it.*’ *1st Media, LLC v. Electronic Arts, Inc.*, 694 F.3d 1367, 1372 (Fed. Cir. 2012) (emphasis in original) (quoting *Therasense*, 649 F.3d at 1290); *see also Therasense*, 649 F.3d at 1290 (“In a case involving nondisclosure of information, clear and convincing evidence must show that the applicant *made a deliberate decision* to withhold a *known* material reference.” (emphasis in original) (quotation marks omitted)).

“While deceptive intent can be inferred from indirect and circumstantial evidence, that inference must not only be based on sufficient evidence, but it must also be the single most reasonable inference able to be drawn from the evidence to meet the clear and convincing evidence standard.” *Am. Calcar*, 651 F.3d at 1334 (quoting *Star Scientific, Inc. v. R.J. Reynolds Tobacco Co.*, 537 F.3d 1357, 1366 (Fed. Cir. 2008)). “Indeed, the evidence must be sufficient to *require* a finding of deceitful intent in the light of all the circumstances.” *Therasense*, 649 F.3d at 1290 (emphasis in original) (quotations omitted). “Hence, when there are multiple reasonable inferences that may be drawn, intent to deceive cannot be found.” *Id.* at 1290-91.

The ALJ “should not use a ‘sliding scale,’ where a weak showing of intent may be found sufficient based on a strong showing of materiality, and vice versa.” *Therasense*, 649 F.3d at 1290. “Instead, a court must weigh the evidence of intent to deceive independent of its analysis of materiality.” *Id.* “Proving that the applicant knew of a reference, should have known of its materiality, and decided not to submit it to the PTO does not prove specific intent to deceive.” *Id.*

## **B. The Parties’ Arguments**

LG argues that the ’932 Patent is unenforceable due to inequitable conduct because ITRI’s employees, outside patent counsel, and the inventors of the ’932 Patent knew of the Katoh ’331 Patent, it was material, and failed to disclose this reference to the USPTO. (RIB at

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66.) LG asserts that because the Taiwanese Intellectual Property Office rejected the foreign counterpart of the '932 Patent based on the Katoh '331 Patent, it is "by definition" material prior art. (RIB at 66-67 (citing MPEP § 2001.06(a) (2003).) LG also argues that, as demonstrated in its invalidity analysis, the Katoh '331 Patent also meets the "but for" materiality standard. (RIB at 67.) LG argues that Jian Tai Su, a patent agent with the Taiwanese law firm of Wood & Wu Patent and Trademark Office ("Wood & Wu"), the law firm that prosecuted the Taiwanese Application, and at least three of the named inventors of the '932 Patent knew about the rejection of the Taiwanese Application based on the Katoh '331 Patent. (JX-0077C; JX-0188C; JX-0090C at 62:18-63:24.) LG argues that Mr. Su, the three inventors, and another ITRI employee, Mr. Chen, were all aware that the Katoh '331 Patent was material and that they had a duty to disclose material prior art to the USPTO. (RIB at 68-69.) LG asserts that in spite of this knowledge, the Katoh '331 Patent was not disclosed to the USPTO. (RIB at 69.) LG argues that "[g]iven these circumstances, the only reasonable inference that can be drawn from this non-disclosure is that the inventors, Mr. Chen, and Mr. Su from Wood & Wu intentionally withheld the information in order to gain issuance of the '932 Patent." (RIB at 69.) LG also contends that "ITRI's foregoing actions reveal a pattern of conduct and are highlighted by their failure to make available for depositions Jian-Tai Su and other attorneys from Wood & Wu who prosecuted the '932 Patent application, and who ITRI appears to blame for non-disclosure of the relevant prior art."<sup>5</sup> (RIB at 69 (footnotes omitted); RRB at 23.)

LG argues that ITRI's suggestion that [REDACTED]

[REDACTED] is untenable. (RIB at

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<sup>5</sup> LG raises other conduct it claims fall within this "pattern of conduct." LG originally attempted to allege this conduct was an independent basis for inequitable conduct. However, the ALJ granted ITRI's motion *in limine* to preclude LG from raising this allegations because they were disclosed late. Thus, the ALJ will not allow this conduct in through the backdoor of an attempt to boot strap the existing allegations of inequitable conduct.

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69 n.35; RRB at 22.) Specifically, LG asserts that the correspondence ITRI relies on to substantiate this argument “does not establish that Mr. Chen requested Mr. Su disclose the ’331 Patent.” (RIB at 69 n.35.) LG argues that the correspondence is ambiguous and “raises more questions than it answers.” (RRB at 22.)

ITRI argues that LG has failed to prove ITRI acted with a specific intent to deceive the PTO by clear and convincing evidence. (CIB at 56-57.) ITRI asserts that LG is improperly substituting evidence of materiality for evidence of specific intent. (CIB at 57.) ITRI also argues that the Katoh ’331 Patent does not meet the requirements of “but for” materiality. (CIB at 58.) ITRI further contends that while LG bears the burden of demonstrating intent to deceive, ITRI offered substantial evidence demonstrating its innocence and good faith during prosecution. (CIB at 59.) Specifically, ITRI argues that it presented evidence that [REDACTED] [REDACTED] in connection with the prosecution of the ’932 Patent. (CIB at 59.) ITRI asserts that this is consistent with [REDACTED] [REDACTED]. (CIB at 59.)

Staff takes the view that the evidence does not demonstrate clearly and convincingly that the ’932 Patent is unenforceable for the failure to disclose the Katoh ’331 Patent. (SIB at 58; SRB at 26-27.) Staff believes the dispute focuses on the intent requirement of *Therasense*. (*Id.*) Staff contends that LG has failed to meet its burden of proving specific intent to deceive. (*Id.*) Staff argues that where there are multiple reasonable inferences that can be drawn as reasons for withholding the information, including negligence, deceptive intent cannot be found. (*Id.*; SRB at 26-27.) Staff asserts that this is the case with respect to the failure to disclose the Katoh ’331 Patent because [REDACTED]

[REDACTED]

(*Id.*)

**C. Analysis**

The parties appear to largely agree on the essential circumstances of this claim. On July 17, 2003, ITRI filed application number 92119538 (“Taiwanese Application”) with the Taiwanese Intellectual Property Office. (JX-0027.0081.) On September 24, 2003, ITRI filed application number 10/668,169 with the USPTO, which issued on April 26, 2005 as the ’932 Patent. (JX-0003.0002.) The ’932 Patent claims priority to the Taiwanese Application. (JX-0026.) ITRI asserts that there are differences between the two applications. (CIB at 55.) However, the ALJ agrees with LG and finds that these differences are insubstantial. Indeed, the claims of the application that became the ’932 Patent and the Taiwanese Application are largely identical. (JX-0027.0056; JX-0026.0010.) On June 1, 2004, ITRI filed a request for reexamination of the Taiwanese Application. (JX-0189.0007-10.) A final rejection of the Taiwanese Application issued on April 13, 2009. (JX-0027.0081-82.)

On July 28, 2004, Wood & Wu, the Taiwanese patent law firm handling the prosecution of both applications, sent a letter to ITRI regarding the U.S. application. (JX-0077C.) The letter contained a list of five action items. (*Id.*) The third item stated: [REDACTED]

[REDACTED] (JX-0077C.0004.) In response to this request, Mr. Chen, an employee of ITRI, replied [REDACTED]

[REDACTED] (JX-0077C.)

On June 29, 2004, the USPTO issued an office action including a non-final rejection of all of the original claims. (JX-0026.0042-49.) ITRI’s response was filed on September 29, 2004,

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but did not include an IDS disclosing the Katoh '331 Patent. (*Id.*) On November 29, 2004, the USPTO issue a notice of allowance for the '932 Patent and the patent issued without ever receiving the Katoh '331 Patent. (JX-0026.0065; JX-0003.0002, 003.)

Even if we assume for the sake of argument that the Katoh '331 Patent is “but for” material to the '932 Patent, the ALJ finds that LG’s accusation of inequitable conduct fails because LG has failed to show by clear and convincing evidence that ITRI withheld the Katoh '331 Patent from the USPTO with specific intent to deceive the USPTO. The ALJ finds that LG bases its arguments on circumstantial evidence, none of which leads to the single best inference that ITRI acted with an intent to deceive. LG’s arguments, even if they do not acknowledge it explicitly, appear to rely on the high materiality of the Katoh '331 Patent and actions the Taiwanese Intellectual Property Office to establish ITRI possessed the requisite intent to deceive. However, the Federal Circuit in *Therasense* forbade such an approach to finding intent to deceive. *See Therasense*, 649 F.3d at 1290. The mere fact that ITRI, the inventors, and its attorneys knew of the reference and that it was material is insufficient to establish intent to deceive. *See 1st Media*, 694 F.3d at 1372-73. LG also attempts to support its contention that ITRI acted with a specific intent to deceive based on ITRI’s alleged withholding of the attorneys from Wood & Wu from testifying. However, LG made no efforts to obtain the testimony from Wood & Wu using The Hague Convention or Letters Rogatory. In such a circumstance where LG has failed to exhaust the possible avenues for obtaining the evidence, the ALJ refuses to draw any inferences that LG requests from the lack of testimony from the attorneys at Wood & Wu. Thus, LG has come forward with no competent evidence that establishes at all, let alone by clear and convincing evidence that ITRI acted with a specific intent to deceive the USPTO.

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As for the correspondence between Wood & Wu and ITRI regarding the Katoh '331 Patent (CX-077C), the ALJ finds that it further supports a finding that LG has failed to prove intent to deceive. As LG admits in its reply brief, this letter “raises more questions than it answers.” At the very least, this letter raises the possibility that the reason the Katoh '331 Patent was not disclosed was due to negligence (likely gross negligence) by Wood & Wu. However, gross negligence cannot satisfy the intent requirement. *See Therasense*, 649 F.3d at 1290. In such a situation, the ALJ cannot say that the evidence requires a finding of intent to deceive because this evidence is susceptible to multiple inferences. *See Therasense*, 649 F.3d at 1290-91 (“Hence, where there are multiple reasonable inferences that may be drawn, intent to deceive cannot be found.”); *Scanner Techs. Corp. v. ICOS Vision Sys. Corp.*, 528 F.3d 1365, 1376 (Fed. Cir. 2008) (“Whenever evidence proffered to show either materiality or intent is susceptible to multiple reasonable inferences, a district court clearly errs in overlooking one inferences in favor of another equally reasonable inference.”).

Thus, the ALJ finds that there is absolutely no evidence that would establish that ITRI “made a deliberate decision to withhold” the Katoh '331 Patent—let alone support such a finding by clear and convincing evidence. Accordingly, LG’s defense of inequitable conduct fails.

## IV. OTHER DEFENSES

The parties also discussed the “defense” of prosecution history estoppel. However, the ALJ has already rejected ITRI’s doctrine of equivalents argument because ITRI’s expert utterly failed to present any meaningful evidence to support its doctrine of equivalent contention. Thus, the ALJ finds it unnecessary to consider whether the contention would be barred by prosecution history estoppel.

**V. CONCLUSIONS OF LAW**

1. Claims 6, 9, and 10 of the '932 Patent are invalid under 35 U.S.C. § 102 for anticipation by the Yao '892 Publication, but are not anticipated by any of the other asserted references.
2. Claims 6, 9, and 10 of the '932 Patent are not invalid under 35 U.S.C. § 103 for obviousness.
3. Claims 6, 9, and 10 of the '932 Patent are not invalid for failure to satisfy the written description requirement under 35 U.S.C. § 112.
4. Claims 6, 9, and 10 of the '932 Patent are not invalid for failure to satisfy the definiteness requirement under 35 U.S.C. § 112.
5. The '932 Patent is not unenforceable due to inequitable conduct.
6. It has not been established that a violation exists of section 337 for the asserted claims of the '932 Patent.

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**VI. INITIAL DETERMINATION AND ORDER**

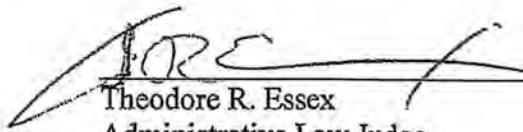
Based on the foregoing, it is the REMAND INITIAL DETERMINATION of this ALJ that a no violation of section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337, has occurred in the importation into the United States, the sale for importation, or the sale within the United States after importation of certain devices for improving uniformity used in a backlight module and components thereof and products containing the same that infringe one or all of claims 6, 9 and 10 of U.S. Patent No. 6,883,932.

The Secretary shall serve a public version of this ID upon all parties of record and the confidential version upon counsel who are signatories to the Protective Order (Order No. 1.) issued in this investigation, and upon the Commission investigative attorney.

Within seven days of the date of this document, each party shall submit to the office of the Administrative Law Judge a statement as to whether or not it seeks to have any portion of this document deleted from the public version. The parties' submissions must be made by hard copy by the aforementioned date.

Any party seeking to have any portion of this document deleted from the public version thereof must submit to this office (1) a copy of this document with red brackets indicating any portion asserted to contain confidential business information by the aforementioned date and (2) a list specifying where said redactions are located. The parties' submission concerning the public version of this document need not be filed with the Commission Secretary.

**SO ORDERED.**

  
Theodore R. Essex  
Administrative Law Judge

**CERTAIN DEVICES FOR IMPROVING UNIFORMITY  
USED IN A BACKLIGHT MODULE AND PRODUCTS  
CONTAINING THE SAME**

**Inv. No. 337-TA-805**

**PUBLIC CERTIFICATE OF SERVICE**

I, Lisa R. Barton, hereby certify that the attached **INITIAL DETERMINATION (PUBLIC VERSION)** has been served by hand upon the Commission Investigative Attorney, Vu Q. Bui, Esq., and the following parties as indicated on **March 11, 2013**.



Lisa R. Barton, Acting Secretary  
U.S. International Trade Commission  
500 E Street, SW, Room 112  
Washington, DC 20436

**On Behalf of Complainants Industrial Technology Research  
Institute and ITRI International Inc.:**

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(  ) Via Overnight Delivery  
(  ) Via First Class Mail  
( ) Other: \_\_\_\_\_

**On Behalf of Respondents LG Electronics, Inc., LG  
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( ) Other: \_\_\_\_\_

**UNITED STATES INTERNATIONAL TRADE COMMISSION**  
**Washington, D.C. 20436**

**In the Matter of**

**CERTAIN DEVICES FOR IMPROVING  
UNIFORMITY USED IN A BACKLIGHT  
MODULE AND COMPONENTS  
THEREOF AND PRODUCTS  
CONTAINING SAME**

**Investigation No. 337-TA-805**

**NOTICE OF COMMISSION DECISION TO REVIEW A FINAL INITIAL  
DETERMINATION FINDING NO VIOLATION OF SECTION 337; REMAND-IN-PART  
OF THE INVESTIGATION TO THE ADMINISTRATIVE LAW JUDGE**

**AGENCY:** U.S. International Trade Commission.

**ACTION:** Notice.

**SUMMARY:** Notice is hereby given that the U.S. International Trade Commission has determined to review the presiding administrative law judge's ("ALJ") final initial determination ("ID") issued on October 22, 2012, finding no violation of section 337 of the Tariff Act of 1930, (as amended), 19 U.S.C. § 1337 ("section 337"), in the above-captioned investigation. The Commission has also determined to remand-in-part the investigation to the ALJ.

**FOR FURTHER INFORMATION CONTACT:** Megan M. Valentine, Office of the General Counsel, U.S. International Trade Commission, 500 E Street, S.W., Washington, D.C. 20436, telephone (202) 708-2301. Copies of non-confidential documents filed in connection with this investigation are or will be available for inspection during official business hours (8:45 a.m. to 5:15 p.m.) in the Office of the Secretary, U.S. International Trade Commission, 500 E Street, S.W., Washington, D.C. 20436, telephone (202) 205-2000. General information concerning the Commission may also be obtained by accessing its Internet server at <http://www.usitc.gov>. The public record for this investigation may be viewed on the Commission's electronic docket (EDIS) at <http://edis.usitc.gov>. Hearing-impaired persons are advised that information on this matter can be obtained by contacting the Commission's TDD terminal on (202) 205-1810.

**SUPPLEMENTARY INFORMATION:** The Commission instituted this investigation on September 14, 2011, based on a complaint filed by Industrial Technology Research Institute of Hsinchu, Taiwan and ITRI International Inc. of San Jose, California (collectively "ITRI"). 76 *Fed. Reg.* 56796-97 (Sept. 14, 2011). The complaint alleges violations of section 337 in the importation into the United States, the sale for importation, and the sale within the United States after importation of certain devices for improving uniformity used in a backlight module and components thereof and products containing same by reason of infringement of certain claims of

U.S. Patent No. 6,883,932 (“the ’932 patent”). The complaint further alleges the existence of a domestic industry. The Commission’s notice of investigation named as respondents LG Corporation of Seoul, Republic of South Korea; LG Electronics, Inc. of Seoul, Republic of South Korea; and LG Electronics, U.S.A., Inc. of Englewood Cliffs, New Jersey. The Office of Unfair Import Investigation was named as a participating party. The complaint was later amended to add respondents LG Display Co., Ltd. of Seoul, Republic of South Korea and LG Display America, Inc. of San Jose, California to the investigation. Notice (Feb. 2, 2012); Order No. 11 (Jan. 19, 2012). The Commission later terminated LG Corporation from the investigation. Notice (July 13, 2012); Order No. 18 (June 22, 2012).

On October 22, 2012, the ALJ issued his ID, finding no violation of section 337 as to the ’932 patent. The ID included the ALJ’s recommended determination (“RD”) on remedy and bonding. In particular, the ALJ found that claims 6, 9 and 10 of the ’932 patent are not infringed literally or under the Doctrine of Equivalents by the accused products under his construction of the claim limitation “structured arc sheet” found in claim 6. The ALJ also found that ITRI’s domestic industry product does not satisfy the technical prong of the domestic industry requirement. The ALJ did find, however, that ITRI has satisfied the economic prong of the domestic industry requirement under 19 U.S.C. § 1337(a)(3)(A) and (B). Because he found no infringement and no domestic industry, the ALJ did not reach the issues of patent validity or enforceability. In the event the Commission found a violation of section 337, the ALJ recommended that the appropriate remedy is a limited exclusion order barring entry of LG’s infringing products. The ALJ also recommended issuance of cease and desist orders against LG Electronics USA and LG Display America. The ALJ further recommended that LG be required to post a bond of one percent of the entered value of each infringing product for the importation of products found to infringe during the period of Presidential review.

On November 5, 2012, ITRI filed a petition for review of certain aspects of the final ID. Also on November 5, 2012, participating respondents LG Electronics, Inc., LG Electronics U.S.A., Inc., LG Display Co., Ltd., and LG Display America, Inc. (collectively “LG”) filed a contingent petition for review of certain aspects of the ID. On November 13, 2012, ITRI filed a response to LG’s contingent petition for review. Also on November 13, 2012, LG filed a response to ITRI’s petition for review. Further on November 13, 2012, the Commission investigative attorney filed a combined response to ITRI’s and LG’s petitions. No post-RD statements on the public interest pursuant to Commission Rule 210.50(a)(4) or in response to the post-RD Commission Notice issued on October 24, 2012, were filed. *See 77 Fed. Reg. 65579* (Oct. 29, 2012).

Having examined the record of this investigation, including the ALJ’s final ID, the petitions for review, and the responses thereto, the Commission has determined to review the final ID in its entirety. The Commission does not seek further briefing at this time. The Commission also remands the investigation to the ALJ to consider parties’ invalidity and unenforceability arguments and make appropriate findings.<sup>1</sup> In light of the remand, the ALJ shall set a new target date consistent with the Remand Order.

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<sup>1</sup> The ALJ should have resolved these issues given the procedural posture of this investigation

Briefing, if any, on remanded and reviewed issues will await Commission consideration of the remand ID. The current target date for this investigation is February 28, 2013.

The authority for the Commission's determination is contained in section 337 of the Tariff Act of 1930, as amended (19 U.S.C. § 1337), and in sections 210.42-46 and 210.50 of the Commission's Rules of Practice and Procedure (19 C.F.R. § 210.42-46 and 210.50).

By order of the Commission.

A handwritten signature in black ink, appearing to read 'Lisa R. Barton', with a large, stylized flourish at the end.

Lisa R. Barton  
Acting Secretary to the Commission

Issued: December 21, 2012

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(i.e., post-hearing), and the absence of an extraordinary fact situation that would weigh heavily against resolving these material issues presented in the record. *See Certain Video Game Systems and Wireless Controllers and Components Thereof*, Inv. 337-TA-770, Comm'n Op. at n.1 (Nov. 6, 2012).

**UNITED STATES INTERNATIONAL TRADE COMMISSION**  
**Washington, D.C. 20436**

**In the Matter of**

**CERTAIN DEVICES FOR IMPROVING  
UNIFORMITY USED IN A BACKLIGHT  
MODULE AND COMPONENTS  
THEREOF AND PRODUCTS  
CONTAINING SAME**

**Investigation No. 337-TA-805**

**ORDER: REMAND OF INVESTIGATION**

The Commission instituted this investigation on September 14, 2011, based on a complaint filed by Industrial Technology Research Institute of Hsinchu, Taiwan and ITRI International Inc. of San Jose, California (collectively “ITRI”). 76 *Fed. Reg.* 56796-97 (Sept. 14, 2011). The complaint alleges violations of section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337 (“section 337”), in the importation into the United States, the sale for importation, and the sale within the United States after importation of certain devices for improving uniformity used in a backlight module and components thereof and products containing same by reason of infringement of certain claims of U.S. Patent No. 6,883,932 (“the ’932 patent”). The complaint further alleges the existence of a domestic industry. The Commission’s notice of investigation named as respondents LG Corporation of Seoul, Republic of South Korea; LG Electronics, Inc. of Seoul, Republic of South Korea; and LG Electronics, U.S.A., Inc. of Englewood Cliffs, New Jersey. The Office of Unfair Import Investigation was named as a participating party. The complaint was later amended to add respondents LG Display Co., Ltd. of Seoul, Republic of South Korea and LG Display America, Inc. of San Jose, California to the investigation. Notice (Feb. 2, 2012); Order No. 11 (Jan. 19, 2012). The Commission later terminated LG Corporation from the investigation. Notice (July 13, 2012); Order No. 18 (June 22, 2012).

On October 22, 2012, the presiding administrative law judge (“ALJ”) issued his final initial determination (“ID”), finding no violation of section 337 as to the ’932 patent. The ID included the ALJ’s recommended determination (“RD”) on remedy and bonding. In particular, the ALJ found that claims 6, 9 and 10 of the ’932 patent are not infringed literally or under the Doctrine of Equivalents by the accused products under his construction of the claim limitation “structured arc sheet” found in claim 6. The ALJ also found that ITRI’s domestic industry product does not satisfy the technical prong of the domestic industry requirement. The ALJ did find, however, that ITRI has satisfied the economic prong of the domestic industry requirement under 19 U.S.C. § 1337(a)(3)(A) and (B). Because he found no infringement and no domestic industry, the ALJ did not reach the issues of patent validity or enforceability.

On November 5, 2012, ITRI filed a petition for review of certain aspects of the final ID. Also on November 5, 2012, participating respondents LG Electronics, Inc., LG Electronics U.S.A., Inc., LG Display Co., Ltd., and LG Display America, Inc. (collectively "LG") filed a contingent petition for review of certain aspects of the ID. On November 13, 2012, ITRI filed a response to LG's contingent petition for review. Also on November 13, 2012, LG filed a response to ITRI's petition for review. Further on November 13, 2012, the Commission investigative attorney filed a combined response to ITRI's and LG's petitions.

Upon consideration of this matter, the Commission hereby ORDERS that:

1. The investigation is remanded to the ALJ to (1) consider parties' invalidity and unenforceability arguments and make appropriate findings and (2) issue a final initial remand determination ("RID") on these issues.
2. The ALJ shall issue an ID within 30 days of this Order extending the target date as he deems necessary to accommodate the remand, but in no event shall the target date be extended more than four (4) months. The RID shall issue four months before the target date.
3. The RID will be processed in accordance with Commission rules 210.42, 210.43-.46, and 210.50. Any petitions for review will be due 12 days after service of the RID. Responses to any petition for review will be due 8 days after service of the petition. The RID will become the Commission's final determination 60 days after issuance unless the Commission orders review.
4. The ALJ shall not reopen the record to receive new evidence, and he should issue the RID based upon the parties' post-hearing briefing.

Notice of this Order shall be served on the parties to this investigation.

By order of the Commission.



Lisa R. Barton  
Acting Secretary to the Commission

Issued: December 21, 2012

**CERTAIN DEVICES FOR IMPROVING UNIFORMITY  
USED IN A BACKLIGHT MODULE AND PRODUCTS  
CONTAINING THE SAME**

**Inv. No. 337-TA-805**

**PUBLIC CERTIFICATE OF SERVICE**

I, Lisa R. Barton, hereby certify that the attached **NOTICE** has been served by hand upon the Commission Investigative Attorney, Vu Q. Bui, Esq., and the following parties as indicated on **December 21, 2012**.



Lisa R. Barton, Acting Secretary  
U.S. International Trade Commission  
500 E Street, SW, Room 112  
Washington, DC 20436

**On Behalf of Complainants Industrial Technology Research  
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PUBLIC VERSION

UNITED STATES INTERNATIONAL TRADE COMMISSION  
Washington, D.C.

**In the Matter of**

**CERTAIN DEVICES FOR IMPROVING  
UNIFORMITY USED IN A BACKLIGHT  
MODULE AND COMPONENTS  
THEREOF AND PRODUCTS  
CONTAINING SAME**

**Inv. No. 337-TA-805**

**INITIAL DETERMINATION ON VIOLATION OF SECTION 337 AND  
RECOMMENDED DETERMINATION ON REMEDY AND BOND**

Administrative Law Judge Theodore R. Essex

(October 22, 2012)

**Appearances:**

*For the Complainants Industrial Technology Research Institute and ITRI International:*

Michael W. Shore, Esq.; Alfonso Garcia Chan, Esq.; Patrick Conroy, Esq.; Justin B. Kimble, Esq.; and Ari Rafilson, Esq. of Shore Chang Bragalone DePumpo LLP of Dallas, Texas

Tom M. Schaumberg, Esq.; Paul M. Bartowski, Esq.; and Thomas R. Burns, Jr., Esq. of Adduci, Mastriani & Schaumberg LLP of Washington, D.C.

*For the Respondents LG Electronics, Inc., LG Electronics U.S.A., Inc., LG Display Co., Ltd., and LG Display America, Inc.:*

Charles F. Schill, Esq.; John M. Caracappa, Esq.; Jamie B. Beaber, Esq.; Paul A. Gennari, Esq.; Gretchen P. Miller, Esq.; Tiffany A. Miller, Esq.; Stanley C.T. Kuo, Esq.; and Rose C. Acoraci, Esq. of Steptoe & Johnson LLP of Washington, D.C.

*For the Commission Investigative Staff:*

Lynn I. Levine, Esq., Director; David O. Lloyd, Esq., Supervising Attorney; Vu Q. Bui, Esq., Investigative Attorney of the Office of Unfair Import Investigations, U.S. International Trade Commission of Washington, D.C.

**PUBLIC VERSION**

Pursuant to the Notice of Investigation, 76 Fed. Reg. 56796 (September 14, 2011), this is the Initial Determination of the in the matter of *Certain Devices for Improving Uniformity Used in a Backlight Module and Components Thereof and Products Containing the Same*, United States International Trade Commission Investigation No. 337-TA-805. See 19 C.F.R. § 210.42(a).

It is held that no violation of section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337, has occurred in the importation into the United States, the sale for importation, or the sale within the United States after importation of certain devices for improving uniformity used in a backlight module and components thereof and products containing the same that infringe one or of claims 6, 9 and 10 of U.S. Patent No. 6,883,932.

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The following abbreviations may be used in this Initial Determination:

<b>CDX</b>	Complainants' demonstrative exhibit
<b>CIB</b>	Complainants' initial post-hearing brief
<b>CPX</b>	Complainants' physical exhibit
<b>CRB</b>	Complainants' reply post-hearing brief
<b>CX</b>	Complainants' exhibit
<b>Dep.</b>	Deposition
<b>JX</b>	Joint Exhibit
<b>RDX</b>	Respondents' demonstrative exhibit
<b>RIB</b>	Respondents' initial post-hearing brief
<b>RPX</b>	Respondents' physical exhibit
<b>RRB</b>	Respondents' reply post-hearing brief
<b>RRX</b>	Respondents' rebuttal exhibit
<b>RX</b>	Respondents' exhibit
<b>SIB</b>	Staff's initial post-hearing brief
<b>SRB</b>	Staff's reply post-hearing brief
<b>Tr.</b>	Transcript

## I. BACKGROUND

### A. Institution and Procedural History of This Investigation

By publication of a notice in the *Federal Register* on September 14, 2011, pursuant to subsection (b) of section 337 of the Tariff Act of 1930, as amended, the Commission instituted Investigation No. 337-TA-805 with respect to U.S. Patent No. 6,883,932 (“the ‘932 Patent”) to determine:

[W]hether there is a violation of subsection (a)(1)(B) of section 337 in the importation into the United States, the sale for importation, or the sale within the United States after importation of the sale for importation, or the sale within the United States after importation of certain devices for improving uniformity used in a backlight module and components thereof and products containing the same that infringe one or more of claims 6, 9, and 10 of the ‘932 patent, and whether an industry in the United States exists as required by subsection (a)(2) of section 337.

76 Fed. Reg. 56796 (September 14, 2011).

The complainants are Industrial Technology Research Institute and ITRI International, Inc. (collectively, “ITRI”). (*Id.*) The Notice of Investigation named the respondents as LG Corporation of Seoul, South Korea; LG Electronics, Inc. of Seoul, South Korea; and LG Electronics U.S.A., Inc. of Englewood Cliffs, New Jersey. The Commission Investigative Staff of the Office of Unfair Import Investigations is also a party in this investigation. (*Id.*)

On January 19, 2012, the ALJ issued an order granting ITRI’s motion to amend the Complaint to add LG Display Co., Ltd. of Seoul, South Korea and LG Display America, Inc. of San Jose, California. (Order No. 11.) On February 2, 2012, the Commission determined to review the order to note that the Notice of Investigation must be amended as well. (Notice of Commission Determination to Review and Modify an Initial Determination Granting Complainants’ Motion to Amend the Complaint) (February 2, 2012).

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On June 22, 2012, the ALJ issued an order granting ITRI's motion to partially terminate the investigation as to LG Corporation based on withdrawal of the amended complaint against LG Corporation. (Order No. 18.) On July 13, 2012, the Commission determined not to review the order. (Notice of Commission Determination Not to Review an Initial Determination Granting Complainants' Motion to Partially Terminate the Investigation Based on Withdrawal of the Amended Complaint as to Respondent LG Corporation) (July 13, 2012).

The evidentiary hearing took place from June 23-24, 2012.

**B. The Parties**

Complainant Industrial Technology Research Institute has a principal address of 195, Sec. 4, Chung Hsing Road, Chutung, Hsinchu, Taiwan 21040. (JX-016, ¶ 6.) Industrial Technology Research Institute engages in research and development in various technologies, including televisions and monitors. (*Id.*) Complainant ITRI International is the U.S. subsidiary of Industrial Technology Research Institute and has a principal address of 2880 Zanker Road, Suite 109, San Jose, CA, 95134. (JX-016, ¶ 6.)

Respondent LG Electronics, Inc. is a Korean corporation with a principal place of business at LG Twin Towers, 20 Yeouido-dong, Yeongdeungpo-gu, Seoul 150-721, South Korea. (JX-022, ¶ 12.) LG Electronics, Inc. is in the business of, *inter alia*, distributing and selling display devices, including televisions and monitors. (*Id.*) Respondent LG Electronics U.S.A., Inc. is a wholly-owned subsidiary of LG Electronics, Inc., and has a principal place of business at 1000 Sylvan Avenue, Englewood Cliffs, NJ, 07632. (JX-022, ¶ 13.)

Respondent LG Display Co., Ltd. is a Korean corporation with a principal place of business at LG Twin Towers, 20 Yeouido-dong, Yeongdeungpo-gu, Seoul 150-721, South Korea. (JX-023, ¶ 14.) LG Display Co., Ltd. is in the business of, *inter alia*, manufacturing panel

modules for display devices. (*Id.*) Respondent LG Display America, Inc. is a wholly-owned subsidiary of LG Display Co., Ltd., and has a principal place of business at 2540 North First Street, Suite 400, San Jose, CA 95131. (JX-024, ¶ 15.)

### C. The Patent at Issue and Overview of the Technology

#### 1. The '932 Patent

U.S. Patent No. 6,883,932 (“the '932 Patent”), entitled “Apparatus for Improving Uniformity Used in a Backlight Module,” was filed on September 24, 2003, and issued on April 26, 2005. (*See* JX-003). I-Kai Pan, Po-Hung Yau, Yu-Nan Pao, and Chi-Feng Chen are the named inventors of the '932 Patent. (*Id.*)

The asserted claims of the '932 Patent are claims 6, 9, and 10. Claim 6 is an independent and claims 9 and 10 depend on claim 6. These claims read as follows (with the disputed claim terms in **bold**):

6. An apparatus for **improving uniformity** used in a **backlight module** comprising:  
a plurality of light sources for providing an illuminating light;  
a **reflective housing** adjacent to the light sources for receiving the light sources and reflecting the illuminating light;  
and two **structured arc sheets** mounted at the periphery of the light source for making the illuminating light **uniform**, wherein said structured arc sheets have different thickness or curvature.
9. The apparatus as claimed in claim 6, wherein the apparatus is used in a liquid crystal display.
10. The apparatus as claimed in claim 6 wherein the two structured arc sheets are not in the same plane.

The '932 Patent generally discloses and claims an apparatus for improving uniformity used in backlight modules using light sources, reflective housing and at least one structured arc sheet. (*Id.* at Abstract.)

**D. The Products At Issue**

**1. The Accused Products**

The accused products at issue in this investigation include LG LCD televisions and monitors, including Model Nos. 26LV2500, 37LV3500, 42LK520, 47LV3700, 42LV5500, 65LW6500, 32LV2500, 42LV5400, 42LV3500, 47LV5400, 47LW5700, 55LV5400, 55LW6500, 22LV2500, 32LK330, 42LD452B, 47LK520, 55LV4400, N1910LZ-BF, L2000CP, W2246PM, E2340V, E2411PU, E1910T-BN, LD4200TM, 55LW5300, 47LK451C, 47LD452C, 22LD350, 22LH200C, 47LE5500, 47LE8500, 47LX6500, 47LX9500, 55LV3700, 55LV5500, and IPS231B-BN (collectively “the Accused Products”). (CIB at 3-4.)

**2. Domestic Industry Products**

ITRI relies on the products of its licensee, Samsung, to meet the domestic industry requirement. Specifically, ITRI relies on the following Samsung televisions: LN26B360, LN26B460, LN32D450, LN40A630M1F, LN40B500, LN52B550, LN55C630K1F, UN40C6300, UN40D6000SF, UN46B8000, UN46D6400UF, UN46D7000LF, LN32D430G3D, LN52B540P8F, LN55C610N1F, LN55C650L1F, LN55C630, UN40C6500VF, UN40C6400RF, UN40C6500VR, UN40D6050TF, UN40D6300SF, UN46D6420UF, UN46D6450UF, UN46D6500VF, UN46D6900WF, and UN32D6000SF, and S27A550H (collectively “the Domestic Industry Products”). (CIB at 34.)

**II. IMPORTATION OR SALE**

Section 337 of the Tariff Act prohibits the importation into the United States, the sale for importation, or the sale within the United States after importation by the owner, importer, or consignees of articles that infringe a valid and enforceable United States patent. *See* 19 U.S.C. § 1337(a)(1)(B). A complainant “need only prove importation of a single accused product to

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satisfy the importation element.” *Certain Purple Protective Gloves*, 337-TA-500, Order No. 17 (September 23, 2004). The importation requirement can be established through a summary determination motion and irrespective of any finding of infringement of the patents in issue. *See Certain Wireless Communications Equipment, Articles Therein, and Products Containing Same*, 337-TA-577, Order No. 18 (February 22, 2007); *Certain Automated Mechanical Transmission Systems for Medium-Duty and Heavy Duty Trucks and Components Thereof*, 337-TA-503, Order No. 38 (August 12, 2004); *Certain Audio Digital-To-Analog Converters and Products Containing Same*, 337-TA-499, Order No. 15 (June 29, 2004), Notice of Commission Not To Review (July 28, 2004).

LG has stipulated to importing into the United States, selling for importation into the United States, or selling after importation in the United States the Accused Products. (Joint Stipulation Regarding Importation and Domestic Inventory (March 30, 2012).) Accordingly, the ALJ finds that ITRI has established the importation requirement.

### **III. JURISDICTION**

#### **A. Personal and Subject Matter Jurisdiction**

In order to have the power to decide a case, a court or agency must have both subject matter jurisdiction and jurisdiction over either the parties or the property involved. *See Certain Steel Rod Treating Apparatus and Components Thereof*, Inv. No. 337-TA-97, Commission Memorandum Opinion, 215 U.S.P.Q. 229, 231 (1981). For the reasons discussed below, the ALJ finds the Commission has jurisdiction over this investigation.

Section 337 declares unlawful the importation, the sale for importation, or the sale after importation into the United States of articles that infringe a valid and enforceable United States patent by the owner, importer, or consignee of the articles, if an industry relating to the articles

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protected by the patent exists or is in the process of being established in the United States. *See* 19 U.S.C. §§ 1337(a)(1)(B)(I) and (a)(2). Pursuant to Section 337, the Commission shall investigate alleged violations of the Section and hear and decide actions involving those alleged violations.

As set forth *supra* in Section II, ITRI has met the importation requirement. Furthermore, LG does not dispute that the Commission has *in personam* and *in rem* jurisdiction. (RIB at 7.) Accordingly, the ALJ finds that LG has submitted to the jurisdiction of the Commission. *See Certain Miniature Hacksaws*, Inv. No. 337-TA-237, Pub. No. 1948, Initial Determination at 4, 1986 WL 379287 (U.S.I.T.C., October 15, 1986) (unreviewed by Commission in relevant part).

#### IV. CLAIM CONSTRUCTION

##### A. Applicable Law

Pursuant to the Commission's Notice of Investigation, this investigation is a patent-based investigation. *See* 76 Fed. Reg. 54416 (September 7, 2011). Accordingly, all of the unfair acts alleged by ITRI to have occurred are instances of alleged infringement of the '932 Patent. A finding of infringement or non-infringement requires a two-step analytical approach. First, the asserted patent claims must be construed as a matter of law to determine their proper scope.<sup>1</sup> Claim interpretation is a question of law. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995) (*en banc*), *aff'd*, 517 U.S. 370 (1996); *Cybor Corp. v. FAS Techs., Inc.*, 138 F.3d 1448, 1455 (Fed. Cir. 1998). Second, a factual determination must be made as to whether the properly construed claims read on the accused devices. *Id.* at 976.

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<sup>1</sup> Only claim terms in controversy need to be construed, and only to the extent necessary to resolve the controversy. *Vanderlande Indus. Nederland BV v. Int'l Trade Comm'n*, 366 F.3d 1311, 1323 (Fed. Cir. 2004); *Vivid Tech., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999).

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In construing claims, the ALJ should first look to intrinsic evidence, which consists of the language of the claims, the patent's specification, and the prosecution history, as such evidence "is the most significant source of the legally operative meaning of disputed claim language." *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996); *see also Bell Atl. Network Servs., Inc. v. Covad Comm'n Group, Inc.*, 262 F.3d 1258, 1267 (Fed. Cir. 2001). The words of the claims "define the scope of the patented invention." *Id.* And, the claims themselves "provide substantial guidance as to the meaning of particular claim terms." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1314 (Fed. Cir. 2005), *cert. denied*, 546 U.S. 1170 (2006). It is essential to consider a claim as a whole when construing each term, because the context in which a term is used in a claim "can be highly instructive." *Id.* Claim terms are presumed to be used consistently throughout the patent, such that the usage of the term in one claim can often illuminate the meaning of the same term in other claims. *Research Plastics, Inc. v. Federal Pkg. Corp.*, 421 F.3d 1290, 1295 (Fed. Cir. 2005). In addition:

. . . in clarifying the meaning of claim terms, courts are free to use words that do not appear in the claim so long as the resulting claim interpretation . . . accord[s] with the words chosen by the patentee to stake out the boundary of the claimed property.

*Pause Tech., Inc. v. TIVO, Inc.*, 419 F.3d 1326, 1333 (Fed. Cir. 2005).

Some claim terms do not have particular meaning in a field of art, in which case claim construction involves little more than applying the widely accepted meaning of commonly understood words. *Phillips*, 415 F.3d at 1314. Under such circumstances, a general purpose dictionary may be of use.<sup>2</sup> The presumption of ordinary meaning, however, will be "rebutted if the inventor has disavowed or disclaimed scope of coverage, by using words or expressions of

---

<sup>2</sup> Use of a dictionary, however, may extend patent protection beyond that to which a patent should properly be afforded. There is also no guarantee that a term is used the same way in a treatise as it would be by a patentee. *Id.* at 1322.

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manifest exclusion or restriction, representing a clear disavowal of claim scope.” *ACTV, Inc. v. Walt Disney Co.*, 346 F.3d 1082, 1091 (Fed. Cir. 2003).

Sometimes a claim term will have a specialized meaning in a field of art, in which case it is necessary to determine what a person of ordinary skill in that field of art would understand the disputed claim language to mean, viewing the claim terms in the context of the entire patent. *Phillips*, 415 F.3d at 1312-14; *Vitronics*, 90 F.3d at 1582. Under such circumstances, the ALJ must conduct an analysis of the words of the claims themselves, the patent specification, the prosecution history, and extrinsic evidence concerning relevant scientific principles, as well as the meaning of technical terms and the state of the art. *Id.*

A patentee may deviate from the conventional meaning of claim term by making his or her intended meaning clear (1) in the specification or (2) during the patent’s prosecution history. *Lear Siegler, Inc. v. Aeroquip Corp.*, 733 F.2d 881, 889 (Fed. Cir. 1984). If a claim term is defined contrary to the meaning given to it by those of ordinary skill in the art, the specification must communicate a deliberate and clear preference for the alternate definition. *Kumar v. Ovonic Battery Co.*, 351 F.3d 1364, 1368 (Fed. Cir. 2003). In other words, the intrinsic evidence must “clearly set forth” or “clearly redefine” a claim term so as to put one reasonably skilled in the art on notice that the patentee intended to so redefine the claim term. *Bell Atl.*, 262 F.3d at 1268; *see also Thorner v. Sony Computer Entertainment Am., LLC*, 669 F.3d 1362, 1665-67 (Fed. Cir. 2012).

When the meaning of a claim term is uncertain, the specification is usually the first and best place to look, aside from the claim itself, in order to find that meaning. *Phillips*, 415 F.3d at 1315. The specification of a patent “acts as a dictionary” both “when it expressly defines terms used in the claims” and “when it defines terms by implication.” *Vitronics*, 90 F.3d at 1582. For

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example, the specification “may define claim terms by implication such that the meaning may be found in or ascertained by a reading of the patent documents.” *Phillips*, 415 F.3d at 1323. “The construction that stays true to the claim language and most naturally aligns with the patent’s description of the invention will be, in the end, the correct construction.” *Id.* at 1316. However, as a general rule, particular examples or embodiments discussed in the specification are not to be read into the claims as limitations. *Markman*, 52 F.3d at 979.

The prosecution history “provides evidence of how the inventor and the PTO understood the patent.” *Phillips*, 415 F.3d at 1317. For example, the prosecution history may inform the meaning of the claim language by demonstrating how an inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it otherwise would be. *Vitronics*, 90 F.3d at 1582-83; *see also Chimie v. PPG Indus., Inc.*, 402 F.3d 1371, 1384 (Fed. Cir. 2005) (stating, “The purpose of consulting the prosecution history in construing a claim is to exclude any interpretation that was disclaimed during prosecution.”); *Microsoft Corp. v. Multi-tech Sys., Inc.*, 357 F.3d 1340, 1350 (Fed. Cir. 2004) (stating, “We have held that a statement made by the patentee during prosecution history of a patent in the same family as the patent-in-suit can operate as a disclaimer.”). The prosecution history includes the prior art cited, *Phillips*, 415 F.3d at 1317, as well as any reexamination of the patent. *E.I. du Pont de Nemours & Co. v. Phillips Petroleum Co.* 849 F.2d 1430, 1440 (Fed. Cir. 1988) (“Statements made during reissue are relevant prosecution history when interpreting claims.”) (internal citations omitted).

Differences between claims may be helpful in understanding the meaning of claim terms. *Phillips*, 415 F.3d at 1314. A claim construction that gives meaning to all the terms of a claim is preferred over one that does not do so. *Merck & Co. v. Teva Pharms. USA, Inc.*, 395 F.3d 1364,

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1372 (Fed. Cir.), *cert. denied*, 546 U.S. 972 (2005); *Alza Corp. v. Mylan Labs. Inc.*, 391 F.3d 1365, 1370 (Fed. Cir. 2004). In addition, the presence of a specific limitation in a dependent claim raises a presumption that the limitation is not present in the independent claim. *Phillips*, 415 F.3d at 1315. This presumption of claim differentiation is especially strong when the only difference between the independent and dependent claim is the limitation in dispute. *SunRace Roots Enter. Co., v. SRAM Corp.*, 336 F.3d 1298, 1303 (Fed. Cir. 2003). “[C]laim differentiation takes on relevance in the context of a claim construction that would render additional, or different, language in another independent claim superfluous.” *AllVoice Computing PLC v. Nuance Comm’ns, Inc.*, 504 F.3d 1236, 1247 (Fed. Cir. 2007).

The preamble of a claim may also be significant in interpreting that claim. The preamble is generally not construed to be a limitation on a claim. *Bell Commc’ns Research, Inc. v. Vitalink Commc’ns Corp.*, 55 F.3d 615, 620 (Fed. Cir. 1995). However, the Federal Circuit has stated that:

[A] claim preamble has the import that the claim as a whole suggests for it. In other words, when the claim drafter chooses to use both the preamble and the body to define the subject matter of the claimed invention, the invention so defined, and not some other, is the one the patent protects.

*Eaton Corp. v. Rockwell Int’l Corp.*, 323 F.3d 1332, 1339 (Fed. Cir. 2003). If the preamble, when read in the context of an entire claim, recites limitations of the claim, or if the claim preamble is “necessary to give life, meaning, and vitality” to the claim, then the claim preamble should be construed as if in the balance of the claim. *Kropa v. Robie*, 187 F.2d 150, 152 (CCPA 1951); *see also Rowe v. Dror*, 112 F.3d 473, 478 (Fed. Cir. 1997); *Corning Glass Works v. Sumitomo Elec. U.S.A., Inc.*, 868 F.2d 1251, 1257 (Fed. Cir. 1989). In addition:

[W]hen discussing the “claim” in such a circumstance, there is no meaningful distinction to be drawn between the claim preamble and the rest of the claim, for only together do they comprise the “claim.” If, however, the body of the claim

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fully and intrinsically sets forth the complete invention, including all of its limitations, and the preamble offers no distinct definition of any of the claimed invention's limitations, but rather merely states the purpose or intended use of the invention, then the preamble may have no significance to claim construction because it cannot be said to constitute or explain a claim limitation.

*Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1305 (Fed. Cir. 1999). In *Pitney Bowes*, the claim preamble stated that the patent claimed a method of, or apparatus for, “producing on a photoreceptor an image of generated shapes made up of spots.” *Id.* at 1306. The Federal Circuit found that this was not merely a statement describing the invention's intended field of use, but rather that said statement was intimately meshed with the ensuing language in the claim. *Id.* For example, both of the patent's independent claims concluded with the clause, “whereby the appearance of smoothed edges are given to the generated shapes.” *Id.* Because this was the first appearance in the claim body of the term “generated shapes,” the Court found that it could only be understood in the context of the preamble statement “producing on a photoreceptor an image of generated shapes made up of spots.” *Id.* The Court concluded that it was essential that the preamble and the remainder of the claim be construed as one unified and internally consistent recitation of the claimed invention. *Id.*

Finally, when the intrinsic evidence does not establish the meaning of a claim, the ALJ may consider extrinsic evidence, *i.e.*, all evidence external to the patent and the prosecution history, including inventor testimony, expert testimony and learned treatises. *Phillips*, 415 F.3d at 1317. Extrinsic evidence may be helpful in explaining scientific principles, the meaning of technical terms, and terms of art. *Vitronics*, 90 F.3d at 1583; *Markman*, 52 F.3d at 980. However, the Federal Circuit has generally viewed extrinsic evidence as less reliable than the patent itself and its prosecution history in determining how to define claim terms. *Phillips*, 415 F.3d at 1318. With respect to expert witnesses, any testimony that is clearly at odds with the

claim construction mandated by the claims themselves, the patent specification, and the prosecution history should be discounted. *Id.* at 1318.

If the meaning of a claim term remains ambiguous after a review of the intrinsic and extrinsic evidence, then the patent claims should be construed so as to maintain their validity. *Id.* at 1327. However, if the only reasonable interpretation renders a claim invalid, then the claim should be found invalid. *See Rhine v. Casio, Inc.*, 183 F.3d 1342, 1345 (Fed. Cir. 1999).

**B. Level of Ordinary Skill in the Art**

ITRI argues that one of ordinary skill in the art would have “at least a Bachelor’s Degree in Electrical Engineering, Mechanical Engineering, Materials Science, or Physics, or equivalent work experience, along with knowledge of optics and display technology.” (CX-0059C at Q&A 30.) LG argues that one of ordinary skill in the art would have “a B.S. degree in Electrical Engineering plus at least 3 years of related professional experience in the LCD industry, or a person with a higher degree, such as a M.S. in Electrical Engineering with less professional experience. (RIB at 17.) Staff agrees. (SIB at 18.)

The ALJ agrees with LG and Staff and finds that a person of ordinary skill in the art to be one who would have a B.S. in Electrical Engineering plus at least 3 years of related professional experience in the LCD industry or a person with a M.S. in Electrical Engineering with less professional experience.

**C. Disputed Claim Terms**

**1. “structured arc sheet”**

ITRI's Proposed Construction	LG's Proposed Construction	Staff's Proposed Construction
A sheet containing an arc-like structure for altering the pathway of illuminating light in multiple directions	A sheet that is constructed in the shape of an arc	A sheet that is constructed in the shape of an arc

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The parties' principal claim construction dispute centers on the meaning of the term "structured arc sheet." ITRI proposes the construction "a sheet containing an arc-like structure for altering the pathway of illuminating light in multiple directions." LG and Staff suggest that term should be construed as "a sheet that is constructed in the shape of an arc." The ALJ finds that the intrinsic and extrinsic evidence overwhelmingly supports LG's and Staff's construction.

Beginning with the claim language, the parties agree that the term "structured arc sheet" was not a known term in the industry at the time of the invention, so there is no special meaning for the term besides the plain and ordinary meaning that a person of ordinary skill would understand after reviewing the claim language, the specification, and the prosecution history. (CIB at 5; Tr. 475:2-8; RRB at 18; Tr. 107:250-108:7.)

ITRI contends that "[b]asic grammar requires that the words 'structured' and 'arc' modify the noun 'sheets.'" (CIB at 5.) ITRI argues that its construction "gives effect to these modifiers with the first portion of its construction: 'a sheet containing an arc-like structure.'" (CIB at 5.) ITRI argues that the language of the claims suggests that the inventors intended the claimed inventions to cover sheets with more than one arc because "[o]ther optical sheets discussed by LG, such as 'microlens sheets' and 'microprism sheets,' contain more than one lens or prism, respectively[]" and they were well known in the art. (CIB at 5-6.) As for the second part of its definition, "for altering the pathway of illuminating light in multiple directions," ITRI argues that the claim "explicitly requires that the 'structured arc sheets' make the illuminating light uniform" and its construction recognizes this requirement. (CIB at 6; CRB at 8.)

LG argues that "[c]laim 6 recites 'two *structured arc sheets* mounted at the periphery of the light source . . . wherein said *structured arc sheets* have different *thickness or curvature*.'" (RRB at 19 (emphasis in the original).) LG submits that "the parties agree that the claimed

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‘thickness’ is a property of the sheet itself[.]’ (RRB at 19 (citing Tr. 108:19-23)), and that the “claim language uses the term ‘curvature’ in exactly the same way — to describe a property of the sheet itself,” (RRB at 19 (citing RX-0162C at Q/A 70; Tr. 111:13-16)). Thus, LG asserts that “the ‘structured arc sheet’ must itself be curved or arced.” (RRB at 19.)

Staff argues that the claim language does not recite an “arc sheet,” but a “structured arc sheet,” where “structured” modifies “arc sheet.” Thus, Staff suggests that this contradicts ITRI’s argument for its proposed construction and supports LG’s construction. (SRB at 3.) Staff agrees with LG that the claims clearly recite that curvature is a property of the “structured arc sheets.” (*Id.*)

The ALJ finds that the claim language strongly supports LG’s and Staff’s construction for several reasons. First, ITRI’s construction does not obey the rules of “simple grammar” it discusses in its briefs. ITRI is correct that “structured” and “arc” modify “sheet,” but in ITRI’s construction “structured” is transformed into a second noun (“structure”) and “arc” now modifies that second noun instead of “sheet.” However, ITRI’s construction does not stop modifying the original claim language there. Not only does “arc” modify a new noun, but it is transformed into the much broader term “arc-like.” In addition, ITRI’s construction also adds the entirely new concept that the sheet “contain[s]” the “arc-like structures.” None of these changes has any basis in the claim language.

LG and Staff, on the other hand, propose a construction that does obey the “simple grammar” rules that ITRI purports to rely on. In their construction, “structured” and “arc” both modify sheet—a sheet constructed in the shape of an arc. The extraneous concepts of “arc-like” and “containing” are not added in LG’s and Staff’s construction as in ITRI’s construction. Moreover, LG is correct that the remainder of the claim also supports its construction. As LG

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notes, claim 6 recites “two *structured arc sheets* mounted at the periphery of the light source . . . wherein said *structured arc sheets* have different *thickness or curvature*.” This language implies that each of the “structured arc sheets” has the thickness and curvature. In other words, that the “thickness” and “curvature” are properties of the entire “structured arc sheet” not that they are the properties of “arc-like structures” contained in the sheet as ITRI suggests. Thus, the plain language of the claim supports Staff’s and LG’s construction

As for ITRI’s argument that “[o]ther optical sheets discussed by LG, such as ‘microlens sheets’ and ‘microprism sheets,’ contain more than one lens or prism, respectively[,]” and the names for these other sheets supports ITRI’s construction. There is simply no support that contention. Neither term is mentioned anywhere in the patent or other intrinsic evidence, so ITRI’s argument begins on a tenuous foundation. Indeed, ITRI cites no evidence that a person of ordinary skill would reach the conclusion that “structured arc sheet” is even similar to a microlens sheet or microprism sheet — both of which are specific terms in the art. In addition, the term “structured arc sheet” differs substantially from the terms “microlens sheet” and “microprism sheet” because it contains the additional term “structured.” The natural reading of the term “structured” would be that it suggests that the “arc sheet” is constructed in a certain way. In contrast, the terms “microlens sheet” and “microprism sheet” include the terms “lens” and “prism” as well as the modifier “micro,” which suggests a sheet of microscopic lenses or microscopic prisms. Perhaps if the patentee has used the term “microarc sheet,” then there might be some weight behind ITRI’s argument, but without any actual evidence to suggest to the contrary, the term “structured arc sheet” suggests something substantially different than the terms “microlens sheet” and “microprism sheet.”

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As for the second part of ITRI's construction—ITRI's requirement that the "arc-like structure" be "for altering the pathway of illuminating light in multiple directions," the ALJ agrees with Staff and LG that the claim language itself suggests that this is unnecessary. The claim element in question already recites that the "structured arc sheet" is "for making the illuminating light uniform." It is unclear why the additional functional language is necessary when the function of the "structured arc sheet" is already clear from the rest of the claim language. See *Schwing GmbH v. Putzmeister Aktiengesellschaft*, 305 F.3d 1318, 1324 (Fed. Cir. 2002) ("Where a claim uses clear structural language, it is generally improper to interpret it as having functional requirements."); see also *Ecolab, Inc. v. Envirochem, Inc.*, 264 F.3d 1358, 1367 (Fed. Cir. 2001) ("Where the function is not recited in the claim itself by the patentee, we do not import such a limitation."). Moreover, ITRI's suggestion that that the claim needs clarification about how the claimed structure works (CIB at 16; CRB at 8) is unconvincing when the claim already expressly recites a function. The claim language, thus, suggests that it is unnecessary to add this additional function to the claim. The ALJ agrees with Staff that this appears to be an improper attempt to re-write the claim language. See *SRAM Corp. v. AD-II Eng'g Inc.*, 465 F.3d 1331, 1359 (Fed. Cir. 2006).

LG's and Staff's construction is also consistent with specification. ITRI argues that the specification "uses the term . . . in the same fashion as it was used in claim 6 . . ." and thus, ITRI submits that its "proposed construction is consistent with the specification." (CIB at 6.) ITRI also contends that "[t]he specification also explains that 'the parameters of the structured arc sheets, such as curvature, shape, thickness, location, or material, etc., are adjusted appropriately, to meet the requirements.'" (CIB at 6 (quoting JX-0003 at 3:4-7 (emphasis added)).) ITRI asserts that based on this statement "the structure of the 'structured arc sheet' should not be

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limited to a particular size, shape, or number of arcs like LG suggested, because the specification explicitly says these parameters can and should be adjusted depending on the intended use.” (CIB at 6.) ITRI also relies on Figure 1 as supporting its construction because “each of the ‘structured arc sheets’ 23 of Figure 1 contain an arc-like structure.” (CIB at 6.)

The ALJ finds that there can be no dispute that all of the embodiments disclosed in the specification describe devices using “structured arc sheets” that are “sheet constructed in the shape of arc.” The only question is whether ITRI is correct that the specification can support a reading of “structured arc sheet” that is broader than those embodiments disclosed in the specification. The ALJ finds it cannot and that ITRI’s arguments are incorrect for three reasons. First, as demonstrated above, the claim language actually does not support ITRI’s construction. Thus, the fact that the specification uses similar language to the claims actually undermines ITRI’s arguments rather than supports them.

Second, the specification’s use of open language to allow for variation in the properties of the “structured arc sheets” provides no support for the proposition that sheets containing “arc-like structures” are within the scope of the claim. As discussed above, the claim language suggests that at least two of the properties — thickness and curvature — are properties of the entire sheet not properties of “arc-like structures” contained within the sheet. Indeed, the language ITRI relies on—“the parameters of the structured arc sheets, such as curvature, shape, thickness, location, or material, etc., are adjusted appropriately, to meet the requirements....— also confirms that these properties are all properties of the “structured arc sheets” themselves and not of any alleged structures contained within the sheets. The open language in this section that the properties are “adjusted appropriately, to meet the requirements...” merely suggests that the “structured arc sheets” are not limited to one size of LCD display or light source, but can be

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adjusted. This is perfectly consistent with LG's and Staff's construction and does not suggest some completely different embodiment not described in the specification.

Finally, ITRI's citation to Figure 1 is misleading. Figure 1 shows the very sheet constructed in the shape of an arc that LG and Staff have been asserting. ITRI's efforts to argue that it "contains an arc-like structure" is disingenuous and certainly does not support ITRI's arguments that sheets containing microscopic features are within the scope of the claims.

The ALJ finds that LG and Staff, on the other hand, point to portions of the specification that do support their construction. Specifically, LG points to portions of the specification that describe the "structured arc sheets" as having thickness and curvature:

- "[t]he *curvature* diameter of the *structured arc sheet* is not restricted and is preferably longer than the diameter of the [light source]." (JX-0003 at 2:5-7 (emphases added).
- "[t]he thicknesses of the structured arc sheets could be the same or different, as could the *curvatures* of the *structured arc sheets*." *Id.* at 2:15-18 (emphases added).
- "[t]herefore, the parameters of the *structured arc sheets*, such as *curvature*, shape, thickness, location, or material, etc. are adjusted appropriately to meet the requirements." *Id.* at 3:4-7 (emphases added).
- "[t]he two *structured arc sheets* are at the same plane, and have the same *curvature* diameter but different thicknesses, as shown in Fig. 3b." *Id.* at 3:9-11 (emphases added).
- "[f]urthermore, the two *structured arc sheets* may have different *curvatures* at different planes, as shown in Fig. 3c." *Id.* at 3:12-13 (emphases added).
- "[f]urthermore, due to the variety of the adjustable parameters, such as *curvature*, shape, thickness, location or material etc. of the *structured arc sheets*...." *Id.* at 3:31-33 (emphases added).

Thus, the ALJ agrees with LG and Staff that these sections of the specification further support the conclusion that it is the structured arc sheet that has the curvature and thickness, not some

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other structure contained within the sheet, and that the “structured arc sheet” is a sheet constructed in the shape of an arc.

Furthermore, not only does the specification describe the “structured arc sheet” consistently in a manner that would suggest that the entire sheet must be constructed in the shape of an arc, the specification also disparages sheets that are very similar to what ITRI now accuses of infringement. (SIB at 24; RX-0162C at Q/A 82; RX-0325C at Q/A 22.) Specifically, the Background of the Invention states:

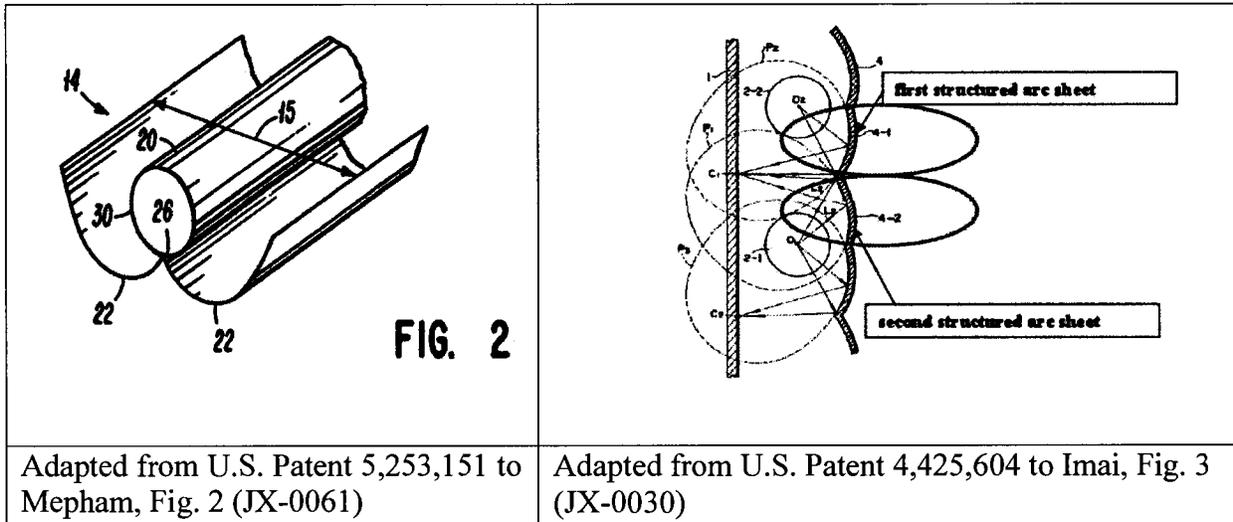
Generally, a light-diffusing sheet is used to uniformly diffuse the illuminating light so that the shadows or line defects are blurred. *Additionally, some light-diffusing sheets are mounted with micro particles having various sizes and densities for refracting or diffusing the illuminating light as uniformly as possible.* However, the illuminating light will be absorbed when passing through the light-diffusing sheet and only about 50% of the original is remains [sic], which leads to a low efficiency of light utility rate. *Therefore, it is desirable to provide an improved an [sic] apparatus for improving uniformity used in a backlight module to mitigate and/or obviate the aforementioned problems.*

(JX-003, 1:25-37 (emphasis added).) The ALJ agrees with Staff that one of ordinary skill in the art would understand this disclosure to provide a description of the problems with prior art light-diffusing sheets with microparticles and that a person of ordinary skill would understand the remainder of the specification to describe an alternative approach. The ALJ further agrees with Staff that ITRI’s proposed construction does not take this statement into account and, instead, encompasses these prior art light-diffusing sheets. (SIB at 24; RX-0325C at Q/A 93-94.) Thus, not only does the specification consistently use “structured arc sheet” in the manner that Staff and LG propose, the only disclosure of anything close to the sheets ITRI now contends are within the scope of its claims is in a section that disparages these sheets. Accordingly, the

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specification is consistent with the claim language and strongly supports LG's and Staff's construction of the term.

The prosecution history also supports LG's and Staff's construction. In a June 29, 2004 Office Action during the prosecution of the application that became the '932 Patent, the Examiner rejected certain application claims under 35 U.S.C. § 103(a) as being unpatentable over Agano (U.S. Patent No. 6,327,091) (JX-053) in view of Imai et al. (U.S. Patent No. 4,425,604) (JX-030). (JX-026 at JX-026.0042-JX-26.0049.) In particular, the Examiner found (i) Agano discloses "the instant claimed invention except for [*sic.*] arc sheet locating [*sic.*] at the periphery of the light source[;]" (ii) that "Imai et al. disclose (FIGS. 2, 3) the arc sheet locating at the periphery of the light source in order to provide uniform illumination (col. 1, lines 58-62)" and (iii) that "Imai et al. disclose (Fig. 2) two arc sheets (4-1) and (4-2) mounted at the periphery of the light sources." (JX-026, JX-026.0045-JX-026.046.) The Examiner also rejected then pending claim 7 "under 35 U.S.C. § 103(a) as being unpatentable over Agano and Imai et al. as applied to claim 1 above, and further in view of Mephram et al. (US 5,253,151)." (JX-026 at JX-026.047.) The Examiner further found that "Agano et al. discloses the instant claimed invention except for the arc sheet that is made of total reflection." (*Id.*) The Examiner found, however, that "Mephram et al. disclose an arced reflection sheet [22] made of total reflection . . . ." (*Id.*) Figure 2 from Imai and the "arced reflection sheet [22]" from Mephram et al. are shown below:



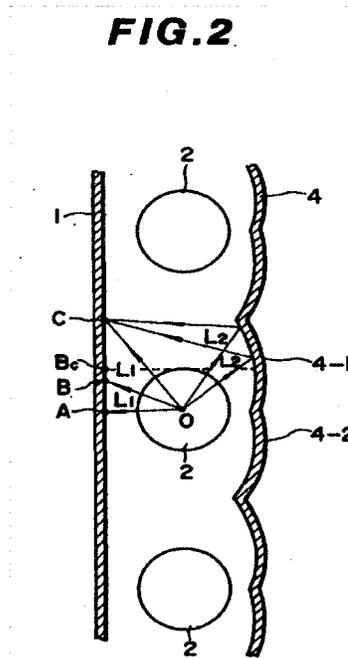
LG and Staff argue that both of these references disclose sheets constructed in the shape of an arc and are thus, consistent with their interpretation of the claims. (RIB at 20-21; SIB at 28-30; SRB at 7-8.)

ITRI, however, argues that Imai discloses a “sheet comprised of multiple arcs” and the patent examiner “referred to the elliptical reflector 4 of Imai as *‘the arc sheet.’*” (CIB at 8-9 (emphasis in the original).) ITRI contends that “the ‘structured arc sheet’ of Imai would not fit LG’s narrow construction: ‘a sheet constructed in the shape of an arc.’” (CIB at 9.)<sup>3</sup> (CIB at 9.)

The ALJ rejects ITRI’s contention that Imai would not meet LG and Staff’s proposed construction. On the contrary, the evidence clearly shows that it does disclose the claimed structured arc sheet. As discussed above, the Examiner found that “Imai et al. disclose (Fig. 2)

<sup>3</sup> It is unclear why the Examiner’s characterization of prior art should be so dispositive in interpreting a claim term, when there was no discussion by the Applicant of these references. See *Salazar v. Procter & Gamble Co.*, 414 F.3d 1342, 1345 (Fed. Cir. 2005). (“[A]n applicant’s silence regarding statements made by the examiner during prosecution, without more, cannot amount to a ‘clear and unmistakable disavowal’ of claim scope.”); see also *3M Innovative Props. Co. v. Avery Dennison Corp.*, 350 F.3d 1365, 1373-74 (Fed. Cir. 2003) (“Prosecution history ... cannot be used to limit the scope of a claim unless the applicant took a position before the PTO. An applicant’s silence in response to an examiner’s characterization of a claim does not reflect the applicant’s clear and unmistakable acquiescence to that characterization if the claim is eventually allowed on grounds unrelated to the examiner’s un rebutted characterization.” (quotation marks and citations omitted)). The ALJ discusses these arguments regardless because they are so specious and also go to the credibility of Dr. Silzars.

two arc sheets (4-1) and (4-2) mounted at the periphery of the light sources.” Figure 2 is reproduced below:



As can be seen in this figure, 4-1 and 4-2 do not “contain an arc-like structure” as ITRI contends, they are actual sheets constructed in the shape of an arc. Instead, the Examiner clearly found that each of 4-1 and 4-2 were each a “structured arc sheet.” Indeed, ITRI’s expert agreed with this assessment. (Tr. 323:18-21.) Thus, there is no merit to ITRI’s contention that the Examiner’s discussion of Imai is inconsistent with LG’s and Staff’s construction.

ITRI further argues that “the examiner, in rejecting several claims of the ’932 patent, stated that U.S. Patent No. 6,327,091 to Agano (“Agano”) disclosed the claimed invention except for certain limitations to the structured arc sheet.” (CIB at 9.) ITRI asserts that “[i]t is clear that the examiner found Agano, which describes a sheet having small beads or microspheres — some so small that they would be measured in microns — at its surface, to be highly relevant to patentability.” (CIB at 9.) ITRI leaps from this statement to the conclusion that “[t]hus, it appears that the examiner believed that Agano had a ‘structured arc sheet,’ as Dr. Silzars

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explained.” (CIB at 9.) ITRI concludes that “Dr. Silzars further testified that the dimensions of the arc in Agano are comparable to those discussed in the ’932 Patent, and that this shows that the arcs can be features on a sheet, instead of the entire sheet being curved.” (CIB at 9 (citing Tr. 115:20-116:23).) ITRI reiterated this position in its reply brief stating: “[T]he examiner’s statements regarding Agano demonstrate that he considered a sheet containing microscopic arc-like structures to be a ‘structured arc sheet.’” (CRB at 9.) ITRI continues that “[s]everal statements by the examiner suggest that the examiner believed that Agano disclosed a structured arc sheet.” (CRB at 9-10.)

ITRI then cites a number of rejections of the dependent claims with limitations related specifically to the structured arc sheets where the Examiner repeated the language from the dependent claim and found that “Agano discloses the instant invention except for....” (CRB at 10.) For example, ITRI quotes the following rejection “Agano discloses the instant claimed invention except for: that arc sheet is made for total reflection.” (CRB at 10.) ITRI claims that these statements mean that “in explaining that Agano did not anticipate certain dependent claims that only further limited the type of ‘structure [*sic.*] arc sheet,’ the examiner repeatedly found that Agano disclosed an arc sheet....” (CRB at 10.)

The ALJ finds that these assertions regarding Agano are not only incorrect, but they are disingenuous. No reasonable person with any knowledge of this art or even a general knowledge of patent law would read the Examiner’s rejection in the way that ITRI and Dr. Silzars suggest. As described above, the Examiner specifically found that “Agano discloses the instant claimed invention *except for arc sheet locating [*sic.*] at the periphery of the light source.*” (JX-026 at JX-026.045.) In this rejection, the Examiner clearly found that Agano did not disclose an arc sheet contrary to what ITRI claims.

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There can be no doubt that this rejection of the independent claim forecloses any argument that Agano discloses any arc sheet because Agano does disclose a *sheet* (which ITRI asserts is an arc sheet) at the periphery of the light source. If this sheet at the periphery of the light source was an arc sheet as ITRI contends, then the Examiner's rejection of the independent claim would make no sense. The only reasonable reading of this rejection is that Agano completely fails to disclose a *structured arc sheet*. Indeed, the Examiner confirmed this conclusion in his discussion of the motivation to combine: "It would have been obvious to one having ordinary skill in the art, at the time the invention was made, to provide *the arc sheet locating [sic.] at the periphery of the light source*, as taught by Imai et al., for the device of Agano, in order to provide uniform illumination." (JX-0026 at JX-0026.0047.) Thus, there is simply no basis for finding that Agano makes any disclosure of "structured arc sheet" based on these statements.

ITRI's other arguments with regard to Agano are also without merit. At one point in its brief, ITRI seems to suggest that because the Examiner relied on Agano for his rejection that Agano must contain an arc sheet. (CIB at 9.) The law of obviousness, however, does not require that every element be found in a reference for it to be used in a combination. *See Cohesive Tech., Inc. v. Waters Corp.*, 543 F.3d 1351, 1364 (Fed. Cir. 2008) ("Obviousness can be proven by combining existing prior art references, while anticipation requires all elements of a claim to be disclosed within a single reference."). Thus, the mere fact that the Examiner relied on Agano in the obviousness analysis suggests nothing about whether it discloses "structured arc sheet" or not.

As for ITRI's reliance on the Examiner's rejections of the dependent claims, ITRI reads too much in the Examiner's decision to simply recite the claim language of the dependent claims in his rejections. ITRI seems to suggest that, in his rejections of the dependent claims, the

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Examiner's statements that Agano failed to disclose the narrow claim element of the dependent claim (e.g., "the arc sheet has a curvature diameter longer than the diameter of the light source" (application claim 8), "two arc sheets mounted at the periphery of the light sources" (application claim 9), "two arc sheets that are not in the same plane" (application claim 15)) meant that the Examiner found that the broader concept—"structured arc sheet"—is disclosed. This argument not only ignores the Examiner's broad statement with respect to claim 1 discussed above, but also reads too much into what the Examiner did not say.

Under ITRI's reasoning, the Examiner would have to recite every pedantic detail of a reference and describe precisely how much the reference discloses in order to foreclose some inference about how she construed the claims. The law is not that petty and does not ascribe such weight to the Examiner's silence. *See Prima Tek II, L.L.C. v. Polypap, S.A.R.L.*, 318 F.3d 1143, 1151 (Fed. Cir. 2003) ("[D]rawing inferences of the meaning of claim terms from an examiner's silence is not a proper basis on which to construe a patent claim."). The ALJ declines to read so much into the Examiner's choice of phrasing. Moreover, when taken as a whole, all of the rejections suggest the opposite conclusion—that Agano has no disclosure of a "structured arc sheet" in any form. The one element that the Examiner consistently found lacking from Agano was the "structured arc sheet" in all of its many permutations claimed in the independent and dependent claims. Thus, Examiner's treatment of Agano provides no support for ITRI's construction.

ITRI's main argument against this overwhelming amount of intrinsic evidence is to argue that LG's and Staff's construction would "conflict with Federal Circuit precedent prohibiting the limitation of claims to an embodiment disclosed in the specification." (CIB at 7.) While the Federal Circuit certainly has "cautioned against limiting the claimed invention to

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preferred embodiments or specific examples in the specification[.]” *Tex. Instruments, Inc. v. U.S. Int’l Trade Comm’n*, 805 F.2d 1558, 1563 (Fed. Cir. 1986), that “rule” cannot enlarge the plain meaning of the claims, *Netword, LLC v. Centraal Corp.*, 242 F.3d 1347, 1352 (Fed. Cir. 2001) (“Although the specification need not present every embodiment or permutation of the invention and the claims are not limited to the preferred embodiment of the invention ... neither do the claims enlarge what is patented beyond what the inventor has described as the invention.”) (internal citations omitted). However, this canon of claim construction is not even invoked in this instance because the claim language is not as broad as ITRI contends. The mere fact that the plain meaning closely hugs the preferred embodiment does not justify, by itself, rewriting or expanding the claims. This is particularly the case where the claim language, specification, and prosecution history all line up behind the proposed construction. *See In re Abbott Diabetes Care Inc.*, --- F.3d ----, 2012 WL 4465236, at \*5-\*6 (Fed. Cir. September 28, 2012). (“But this is not an instance where the specification would necessarily have to disavow an embodiment that would be otherwise covered by the plain language of the claims—rather, claim terms like ‘coupl[ed]’ and ‘receiv[ed]’ are entirely consistent with and even support the specification’s exclusive depiction of an electrochemical sensor without external cables or wires.”).

The ALJ notes that the second half of ITRI’s construction that the “arc-like structures” must be “for altering the pathway of illuminating light in multiple directions” also has no support in the intrinsic evidence. First, as discussed above, the additional function of “altering the pathway . . .” is inconsistent with the claim language, which already existing function of “making the illuminating light uniform....” Second, while ITRI is correct that the specification does contain references to “reflective structured arc sheets . . . for alternating [*sic.*] the pathway of the illuminating light and making the illuminating light more uniform” (JX-003 at 2:56-61),

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Staff correctly notes that this reference is to “reflective structured arc sheets” and not simply structured arc sheets. (SRB at 6.) Thus, it is not clear that the specification necessarily intended to limit the claims. *See Home Diagnostics, Inc. v. LifeScan, Inc.*, 381 F.3d 1352, 1358 (Fed. Cir. 2004) (“Absent a clear disavowal in the specification or the prosecution history, the patentee is entitled to the full scope of its claim language.”). In addition, this reference from the specification recognizes two potential functions for the “structured arc sheet” to “alter[] the pathway of the illuminating light” *and* to “mak[e] the illuminating light more uniform.” The applicant chose to claim one of these, but not the other. It would significantly re-write the claims to add the second function into the claim that patentee was clearly aware of, but chose not to claim. Finally, there is nothing in the prosecution history that would support limiting the claims in the manner ITRI suggests. Thus, the ALJ declines to read the “altering the pathway of the light ...” limitation into the claims.

The ALJ briefly notes that both sides, but particularly ITRI, submit expert testimony that they assert supports their respective constructions. “While helpful, extrinsic sources like expert testimony cannot overcome more persuasive intrinsic evidence.” *Kara Tech. Inc. v. Stamps.com Inc.*, 582 F.3d 1341, 1348 (Fed. Cir. 2009). A “court should discount any expert testimony that is clearly at odds with the claim construction mandated by the claims themselves, the written description, and the prosecution history, in other words, with the written record of the patent.” *Phillips*, 415 F.3d at at 1318 (internal quotation marks omitted). As discussed above, the claim language, specification, and prosecution history all suggest that the term “structured arc sheet” is simply “a sheet constructed in the shape of an arc.” Dr. Silzars’s testimony is at odds with this intrinsic evidence, and the ALJ agrees with LG and Staff that, for that reason alone, it should be disregarded.

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In addition, the ALJ finds that Dr. Silzars's testimony was not credible and is entitled to little weight for several reasons. First, as Dr. Silzars admitted, the term "structured arc sheet" was not a term he had ever heard used in the art before this case. (*See* Tr. 107:20-108:7.) So, it is unclear what, besides reviewing the intrinsic evidence, Dr. Silzars's testimony really adds in this circumstance. Second, the ALJ finds that Dr. Silzars's interpretation of the prosecution history is inconsistent with what was said by the Examiner. Dr. Silzars testified repeatedly that the Examiner found that the Agano disclosed a "structured arc sheet," which, as discussed above, is directly contradicted by the prosecution history. (Tr. 115:20-116:4, 116:14-23, 316:16-317:15, 575:4-9.) The ALJ finds that this reading is not consistent with any good faith reading of the prosecution history. Thus, the ALJ finds that Dr. Silzars's repeated advocacy of this position severely undermines his credibility. For at least these reasons, the ALJ declines to give any weight to Dr. Silzars's testimony regarding claim construction.

LG also offers other extrinsic evidence, including testimony of the named inventors that supports its claim construction. (RIB at 21-22.) LG points to testimony by all three of the named inventors that agree with their construction. (JX-0093C at 113:6-20 (Inventor I-Kai Pan); JX-0092C at 110:20-111:3 (Inventor Yu-Nan Pao); JX-0090C at 255:10-19 (Inventor Po-Hung Yao).) ITRI argues that inventor testimony is of little value for purposes of claim construction. (CIB at 10.) Because the intrinsic record is so clear in this case, the ALJ sees no reason to resort to this additional, consistent extrinsic evidence in construing the claims.

In sum, the ALJ finds that the claim language, the specification's consistent use of the term, the specification's disparagement of the prior art that ITRI now seeks to recapture, and the prosecution history all supports LG's and Staff construction for the term "structured arc

sheet.” Accordingly, the ALJ construes the term “structured arc sheet” to mean “a sheet constructed in the shape of an arc.”

**2. “uniform”**

ITRI’s Proposed Construction	LG’s Proposed Construction	Staff’s Proposed Constructions
<p>The claim term need not be construed.</p> <p>However, if the claim term is construed then it should be given its plain and customary meaning.</p>	<p>Indefinite. In the alternative, and to the extent it can be construed, it should be construed as “having a ratio of minimum to maximum brightness exceeding 90%.”</p>	<p>The term is not indefinite and should be construed to have its plain and ordinary meaning, <i>i.e.</i>, uniform (which is not limited to mean only “having a ratio of minimum to maximum brightness exceeding 90%”)</p>

ITRI argues that “uniform” does not require construction because its meaning is readily apparent from the claim language itself. (CIB at 15.) ITRI argues that the claim term is used throughout the patent without providing any narrower meaning than one of ordinary skill in the art would understand. (CIB at 15-16.) Staff agrees. (SIB at 35-38.)

LG argues that the claim term is indefinite or, in the alternative, if the ALJ determines that it can be construed, then it should be construed to mean “having a ratio of minimum to maximum brightness exceeding 90%.” (RIB at 25.) LG argues that the claim term is indefinite because there is nothing in the specification that discusses “at what point” the light can be considered “uniform” and it can mean different things to one of ordinary skill in the art based on the context. (RIB at 25-26.) LG further argues that Figures 4 and 5 of the specification fail to provide any help in determining the meaning of “uniform” because they merely demonstrate “how the claimed structured arc sheets ‘improve uniformity,’ *not* how to make the light ‘uniform.’” (RIB at 26-27) (emphasis in original). LG further cites to the prosecution history of the Taiwanese patent counterpart where it was also rejected for indefiniteness/lack of enablement. (RIB at 27-28.)

LG further argues, however, that to the extent that the ALJ determines that the claim term can be construed, then it should be construed to mean “having a ratio of minimum to maximum

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brightness exceeding 90%” as that is how it is used by the claims, specification and prosecution history. (RIB at 28-29.) LG further argues that extrinsic evidence, namely exemplary articles and prior art patents, support their proposed definition. (RIB at 28-29.)

The ALJ finds that “uniform” is not indefinite and should be given its plain and ordinary meaning. The claims and the specification support such a construction. The specification uses the term “uniform” consistently and repeatedly throughout the specification and, as correctly noted by Staff, there is no indication in the specification that the claim term is used outside of its common usage in the art:

The object of the present invention is to provide an apparatus for improving uniformity use in backlight module so that the shadows or line defects are prevented from appearing, the uniformity and utility rate of illuminating light are increased, and an improved image quality is obtained.

\* \* \*

In the present example, two reflective structures arc sheets are mounted over each CCFL for alternating the pathway of the illuminating light and making the illuminating light uniform.

\* \* \*

Consequently, a uniform illuminating light is obtained through the optimum design and arrangement of the structured arc sheets.

(JX-3 at 1:41-46; 2:58-61 and 3:17-19.) *Thorner v. Sony Computer Entm't Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012) (Claim terms should generally be given their ordinary and customary meaning unless “1) when a patentee sets out a definition and acts as his own lexicographer, or 2) when the patentee disavows the full scope of a claim term either in the specification or during prosecution.”). Similarly, there is nothing in the language of the claims to indicate that the claim should be given anything but its plain and ordinary meaning. (JX-003 at claims 1 and 6.) Furthermore, extrinsic evidence shows that the term “uniform” is commonly

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used and understood by those of ordinary skill in the art. (CX-350C at Q&A 54; CX-652C at Q&A 25; JX-029, JX-030-33, JX-037; JX-039-41; JX-043-48.) Therefore, the ALJ finds that “uniform” should be given its plain and ordinary meaning.

The ALJ finds LG’s argument that the claim term is indefinite to be unpersuasive. The ALJ finds that LG’s arguments remove the context in which the claim term is used in the patent. Specifically, LG argues that the patent must describe “*at what point* light output from the backlight can be considered ‘uniform’.” (RIB at 25.) LG points to nothing in the claims or the specification that supports such a reading—that “uniform” must be defined by some quantitative manner. Rather, as set forth above, the use of “uniform” throughout the specification and the claims has a more qualitative use in the art. (See JX-0003 at 1:41-46; 2:58-61 and 3:17-19; see also 1:14-33 (describing “uniformly diffuse[ing]” illuminating backlight in the art).)

Similarly, the prior art references show that the use of “uniform” in the art is commonly understood as a qualitative term and does not require exact quantitative explanation as advocated by LG. (JX-0037 at 1:49-57 (“In such a case, in order to improve the efficiency of utilizing light, an optical reflector plate or an optical reflector film is often provided on the opposite surface of said light guide means to the light outputting surface and in order to make the output light uniform, a light diffusing sheet having a light diffusing function is often provided at the light outputting surface side of the light guide means, as disclosed in a Japanese laid-open publication Jikkaihei No. 5-73602 and the like, for example.”); JX-0039 at 9:31-34 (“Even when a picture or image is viewed from a slant direction, the brightness distribution on the overall screen can be made uniform.”).) The ALJ finds that the term “uniform” is not “insolubly ambiguous” nor is it “not amenable to construction” such that it is indefinite. *Datamize, LLC v. Plumtree Software, Inc.*, 417 F.3d 1342, 1347 (Fed. Cir. 2005) (“Only claims “not amenable to

construction” or “insolubly ambiguous” are indefinite.”) (*citing Novo Indus., L.P. v. Micro Molds Corp.*, 350 F.3d 1348, 1353 (Fed. Cir. 2003); *Honeywell Int’l, Inc. v. ITC*, 341 F.3d 1332, 1338 (Fed. Cir. 2003); *Exxon Research & Eng’g Co. v. United States*, 265 F.3d 1371, 1375 (Fed. Cir. 2001).)

The ALJ further finds that LG’s proposed construction for “uniform” also fails because it is unsupported by the claims and the specification. LG points to nothing in the claims or specification that supports their proposal that “uniform” means “having a ratio of minimum to maximum brightness exceeding 90%.” Indeed, LG only cites to extrinsic evidence, *i.e.*, Respondents’ expert’s testimony and prior art, in support of their proposed construction. (*See* RIB at 28-29.) *Markman*, 52 F.3d at 981 (“Extrinsic evidence is to be used for the court’s understanding of the patent, not for the purpose of varying or contradicting the terms of the claims.”), *Id.* (“[T]he court has complete discretion to adopt the expert legal opinion as its own, to find guidance from it, or to ignore it entirely, or even to exclude it. When legal ‘experts’ offer their conflicting views of how the patent should be construed, or where the legal expert’s view of how the patent should be construed conflicts with the patent document itself, such conflict does not create a question of fact nor can the expert opinion bind the court or relieve the court of its obligation to construe the claims according to the tenor of the patent.”)

Therefore, the ALJ finds that “uniform” should be given its plain and ordinary meaning.

**3. “reflective housing”**

ITRI’s Proposed Construction	LG’s Proposed Construction	Staff’s Proposed Constructions
This term does not require construction	A backlight module casing with highly reflective surfaces	Plain and ordinary meaning, <i>i.e.</i> , reflective housing (which is not limited to mean only “a backlight module casing with highly reflective surfaces)

LG argues that “reflective housing” means “a backlight module casing with highly reflective surfaces.” (RIB at 31.) LG argues that “[b]ecause all surfaces reflect light to some

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degree, one of ordinary skill in the art would recognize that the ‘reflective housing’ has to have highly reflective surfaces to receive and reflect illuminating light from the light sources.” (*Id.*) LG argues that Figure 2 of the patent and the specification’s description that the reflective housing is for “receiving the light sources and reflecting the illuminating light” support its construction. LG further argues that the prosecution history supports its proposed construction because the examiner rejected certain claims over prior art Agano that taught a “reflective housing” with “highly reflective surfaces.” (RIB at 32.) The extrinsic evidence, namely the dictionary definition of “housing” and the testimony of LG’s expert, Dr. Escuti, also support LG’s proposed construction. (*Id.*)

ITRI argues that the claim term does not need to be construed as the claim language is sufficient to explain the meaning of “reflective housing.” (CIB at 12.) ITRI further argues that while the specification describes making the reflective housing by “stamping or extrusion” and coating the surface of the reflective housing with “a reflecting and diffusing material,” the claim should not be so limited because “these are explicitly descriptions of mere preference.” (CIB at 12-13.) ITRI further notes that the patent’s use of “reflective housing” throughout the rest of the patent does not provide any limitation to its meaning. (*Id.*) ITRI further argues that Respondents’ proposed construction incorporates concepts not discussed in the patent, namely “highly” reflective surfaces and “casing”. (CIB at 13-14.)

Staff argues that the claim term should be construed because LG’s non-infringement arguments rely on LG’s own construction. (SIB at 31.) However, Staff argues that “reflective housing” should be given its plain and ordinary meaning, which would exclude LG’s proposed construction. (SIB at 31.) Staff argues that neither the claim language, specification nor the

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prosecution history support LG's addition of the requirement of "highly" reflective surfaces. (SIB at 31-32.)

The ALJ finds that "reflective housing" should be given its plain and ordinary meaning. The ALJ finds LG's arguments unpersuasive. Specifically, the ALJ finds that neither the specification nor the prosecution history support LG's proposed construction. LG points to Figure 2 and the description in the specification that "the reflective housing is 'for receiving the light sources and reflecting the illuminating light'" as support for their construction, but there is nothing in the cited language or Figure 2 that support reading "highly reflective" into the claim construction. The cited language simply states that the "reflective housing" receives light and reflects the illuminating light – there is nothing in the language requiring that it be "highly" reflective. Similarly, Figure No. 2 shows reflective housing 22, but there is nothing in the Figure or the accompanying description that requires "highly reflective" surfaces for the reflective housing.

LG's reliance on the prosecution history is equally misplaced. LG cites to Figure 2 of Agano, but fail to cite where in Agano it describes a "highly reflective surface." Figure 2 of Agano, like Figure 2 of the '932 Patent, shows a "reflective housing," but does not show a "highly reflective housing" as asserted by LG. Rather, LG simply makes the conclusory statement that "[t]he Examiner referred to Figure 2, Item 18 of Agano, which shows a backlight module casing with highly reflective surfaces." (RIB at 32.) Respondents rely on the testimony of their expert and a conclusory explanation to come to such a conclusion:

Because all surfaces reflect light to some degree, one of ordinary skill in the art would recognize that the "reflective housing" has to have highly reflective surfaces to receive and reflect illuminating light from light sources.

\* \* \*

Again, because all surfaces reflect light to some degree, the “reflective housing” must have highly reflective surfaces to receive *and* reflect as much illuminating light as possible.

(RIB at 31) (emphasis in original). However, as with the construction for “uniform,” the ALJ finds LG’s reliance on extrinsic evidence to support its claim construction to be flawed and unjustified for the ‘932 Patent.

Therefore, the ALJ finds that “reflective housing” should be given its plain and ordinary meaning.

**4. “improving uniformity” and “backlight module”**

Respondents argue that these two claim terms in the preamble of claim 6 are should be treated as limitations and construed. (RIB at 29-30, 32-33.) The ALJ notes that “as a general rule preamble language is not treated as a limitation.” *Aspex Eyewear, Inc. v. Marchon Eyewear, Inc.*, 672 F.3d 1335, 1347 (Fed. Cir. 2012) (citing *Allen Eng’g Corp. v. Bartell. Indus., Inc.*, 299 F.3d 1336, 1346 (Fed. Cir. 2002)). While the Federal Circuit has explained, that a preamble can be limiting when “it states a necessary and defining aspect of the invention,” *Computer Docking Station Corp. v. Dell, Inc.*, 519 F.3d 1366, 1375 (Fed. Cir. 2008), a preamble is not limiting “where a patentee defines a structurally complete invention and uses the preamble only to state a purpose or intended use for the invention,” *Rowe v. Dror*, 112 F.3d 473, 478 (Fed. Cir. 1997). The ALJ finds that Respondents have failed to show why the preamble should be limiting and be construed.

Here, LG argues that “improving uniformity” should be construed because “[t]his phrase is essential to give life, meaning and vitality to the claim” and “[w]ithout construing this term and without determining whether a structure within a backlight module improves uniformity, there is simply no way to tell whether the structure functions as intended.” (RRB at 10.)

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Respondents provide no reason for construing backlight module except that the specification describes and discusses “direct-bottom-lit backlight modules.” (*See generally* RIB at 32-33.)

The ALJ finds that neither of these arguments shows that the preamble is an “essential structure or steps” or is “necessary to give life, meaning, and vitality” to claim 6. Instead, a review of the patent and prosecution history shows that the preamble merely stated the purpose and intended use for the structurally complete invention.

First, the body of the claim discloses a complete device that contains light sources, reflective housing, and structures arc sheets. There is nothing in the language in the preamble that serves as an antecedent basis for the terms in the body of the claim. *See Catalina Mktg.*, 289 F.3d at 808 (“[D]ependence on a particular disputed preamble phrase for antecedent basis may limit claim scope because it indicates a reliance on both the preamble and claim body to define the claimed invention.”). Indeed, LG is unclear as to what “structural” limitation it asserts the preamble contains.

Second, nothing in prosecution history supports finding the preamble limiting either. Indeed, LG simply notes that the Examiner rejected certain claims over prior art references that “taught the feature of uniformity,” but fails to explain if or how the patentee responded to such a rejection. *ACCO Brands, Inc. v. Micro Sec. Devices, Inc.*, 346 F.3d 1075, 1079 (Fed. Cir. 2003). (an applicant's silence regarding statements made by the examiner during prosecution, without more, cannot amount to a “clear and unmistakable disavowal” of claim scope) (citations omitted).

The preamble simply states the use of the invention, namely “improving uniformity [ ] in backlight module[s].” “[P]reambles describing the use of an invention generally do not limit the claims because the patentability of apparatus or composition claims depends on the claimed structure, not on the use or purpose of that structure.” *Catalina Mktg.*, 289 F.3d at 809.

Therefore, the ALJ finds that the preamble does not limit the claim and declines to construe “improving uniformity” and “backlight module.”

## V. INFRINGEMENT DETERMINATION

### A. Applicable Law

In a Section 337 investigation, the complainant bears the burden of proving infringement of the asserted patent claims by a preponderance of the evidence. *Certain Flooring Products*, Inv. No. 337-TA-443, Commission Notice of Final Determination of No Violation of Section 337, 2002 WL 448690 at 59, (March 22, 2002); *Enercon GmbH v. Int’l Trade Comm’n*, 151 F.3d 1376 (Fed. Cir. 1998).

Each patent claim element or limitation is considered material and essential. *London v. Carson Pirie Scott & Co.*, 946 F.2d 1534, 1538 (Fed. Cir. 1991). Literal infringement of a claim occurs when every limitation recited in the claim appears in the accused device, *i.e.*, when the properly construed claim reads on the accused device exactly. *Amhil Enters., Ltd. v. Wawa, Inc.*, 81 F.3d 1554, 1562 (Fed. Cir. 1996); *Southwall Tech. v. Cardinal IG Co.*, 54 F.3d 1570, 1575 (Fed Cir. 1995).

If the accused product does not literally infringe the patent claim, infringement might be found under the doctrine of equivalents. The Supreme Court has described the essential inquiry of the doctrine of equivalents analysis in terms of whether the accused product or process contains elements identical or equivalent to each claimed element of the patented invention. *Warner-Jenkinson Co., Inc. v. Hilton Davis Chemical Co.*, 520 U.S. 17, 40 (1997).

Under the doctrine of equivalents, infringement may be found if the accused product or process performs substantially the same function in substantially the same way to obtain substantially the same result. *Valmont Indus., Inc. v. Reinke Mfg. Co.*, 983 F.2d 1039, 1043 (Fed.

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Cir. 1993). The doctrine of equivalents does not allow claim limitations to be ignored. Evidence must be presented on a limitation-by-limitation basis, and not for the invention as a whole. *Warner-Jenkinson*, 520 U.S. at 29; *Hughes Aircraft Co. v. U.S.*, 86 F.3d 1566 (Fed. Cir. 1996). Thus, if an element is missing or not satisfied, infringement cannot be found under the doctrine of equivalents as a matter of law. See, e.g., *Wright Medical*, 122 F.3d 1440, 1444 (Fed. Cir. 1997); *Dolly, Inc. v. Spalding & Evenflo Cos., Inc.*, 16 F.3d 394, 398 (Fed. Cir. 1994); *London v. Carson Pirie Scott & Co.*, 946 F.2d 1534, 1538-39 (Fed. Cir. 1991); *Becton Dickinson and Co. v. C.R. Bard, Inc.*, 922 F.2d 792, 798 (Fed. Cir. 1990).

The concept of equivalency cannot embrace a structure that is specifically excluded from the scope of the claims. *Athletic Alternatives v. Prince Mfg., Inc.*, 73 F.3d 1573, 1581 (Fed. Cir. 1996). In applying the doctrine of equivalents, the Commission must be informed by the fundamental principle that a patent's claims define the limits of its protection. See *Charles Greiner & Co. v. Mari-Med. Mfg., Inc.*, 92 F.2d 1031, 1036 (Fed. Cir. 1992). As the Supreme Court has affirmed:

Each element contained in a patent claim is deemed material to defining the scope of the patented invention, and thus the doctrine of equivalents must be applied to individual elements of the claim, not to the invention as a whole. It is important to ensure that the application of the doctrine, even as to an individual element, is not allowed such broad play as to effectively eliminate that element in its entirety.

*Warner-Jenkinson*, 520 U.S. at 29.

Prosecution history estoppel may bar the patentee from asserting equivalents if the scope of the claims has been narrowed by amendment during prosecution. A narrowing amendment may occur when either a preexisting claim limitation is narrowed by amendment, or a new claim limitation is added by amendment. These decisions make no distinction between the narrowing of a preexisting limitation and the addition of a new limitation. Either amendment will give rise

to a presumptive estoppel if made for a reason related to patentability. *Honeywell Int'l Inc. v. Hamilton Sundstrand Corp.*, 370 F.3d 1131, 1139-41 (Fed. Cir. 2004), *cert. denied*, 545 U.S. 1127 (2005)(citing *Warner-Jenkinson*, 520 U.S. at 22, 33-34; and *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 535 U.S. 722, 733-34, 741 (2002)). The presumption of estoppel may be rebutted if the patentee can demonstrate that: (1) the alleged equivalent would have been unforeseeable at the time the narrowing amendment was made; (2) the rationale underlying the narrowing amendment bore no more than a tangential relation to the equivalent at issue; or (3) there was some other reason suggesting that the patentee could not reasonably have been expected to have described the alleged equivalent. *Honeywell*, 370 F.3d at 1140 (citing, *inter alia*, *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 344 F.3d 1359 (Fed. Cir. 2003)(*en banc*)). “Generalized testimony as to the overall similarity between the claims and the accused infringer’s product or process will not suffice [to prove infringement under the doctrine of equivalents].” *Tex. Instruments, Inc. v. Cypress Semiconductor Corp.*, 90 F.3d 1558, 1567 (Fed. Cir. 1996).

To prove direct infringement, ITRI must prove by a preponderance of the evidence that the accused products either literally infringe or infringe under the doctrine of equivalents the method of asserted claims of the '932 Patent. *Advanced Cardiovascular Sys., Inc. v. Scimed Life Sys., Inc.*, 261 F.3d 1329, 1336 (Fed. Cir. 2001).

## **B. The '932 Patent**

### **1. Independent Claim 6**

#### **a) The Accused Products Do Not Literally Infringe Claim 6 of the '932 Patent**

The ALJ finds that the evidence shows that there is no infringement of independent claim 6 of the '932 Patent. Specifically, the ALJ finds that the evidence shows that the Accused

Products do not meet the “structured arc sheet” limitation of the claim and, therefore, do not literally infringe independent claim 6 of the ’932 Patent. ITRI concedes that there is no literal infringement of any asserted claim of the ’932 Patent under the claim construction that the ALJ has adopted. (CIB at 28; Tr. 23:8-21.)

Even if ITRI did not explicitly concede this point, the ALJ finds that the record does not contain any analysis (much less evidence) demonstrating that the Accused Products have any “sheet that is constructed in the shape of an arc.” (RX-325C at Q/A 79-88.) The ALJ further finds that ITRI’s expert did not offer any opinion that the Accused Products literally infringe any asserted claim of the ’932 Patent under the Staff’s and LG’s claim construction, which the ALJ adopted. (RX-325C at Q/A 79-80.) The ALJ finds that LG’s expert analyzed each of the Accused Products and determined that none of the sheets (*i.e.*, diffuser sheets, microlens sheets, microprism sheets, and light guides) found in the Accused Products is “a sheet that is constructed in the shape of an arc” (*i.e.*, a “structured arc sheet”). (RX-325C at Q/A 81-88.) Accordingly, the ALJ finds that the Accused Products do not literally infringe claim 6 of the ’932 Patent.

**b) The Accused Products Do Not Infringe Claim 6 Under The Doctrine Of Equivalents**

The ALJ also finds that the evidence shows that, based on the claim construction adopted by the ALJ, the Accused Products also do not infringe independent claim 6 of the ’932 Patent under the doctrine of equivalents.<sup>4</sup> ITRI’s opening post-hearing brief contains only the following analysis regarding the doctrine of equivalents:

LG's proposed construction of “structured arc sheet” is incorrect. However, to the extent that the ALJ adopts LG's proposed construction, ITRI contends that the LG Products would still contain “structured arc

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<sup>4</sup> LG argues that the doctrine of equivalents does not apply because it is barred by prosecution history estoppel. Because ITRI has failed to prove infringement under the doctrine of equivalents, the ALJ declines to resolve this question and so the ALJ assumes without deciding it is not barred.

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sheets” under the doctrine of equivalents. Dr. Silzars opines that the LG Products would still infringe under such a construction because they would do substantially the same thing, in substantially the same way, to achieve substantially the same result. (*See* CX-0350C at ¶450; Silzars, Tr. 290, 23-7.) Specifically, the LG Products do substantially the same thing by altering the pathway of light from a light source. (*See id.*) The LG Products alter the pathway of light in substantially the same way by employing at least two structured arc sheets, which are semi-transparent sheets comprising arc-like structures. (*See id.*) Thus, the LG Products achieve substantially the same result, making the luminescent light more uniform. (*See id.*)

This is nearly identical and co-extensive to the testimony of ITRI’s expert that is cited. (*See* CX-0350C at Q/A 450.) Thus, this is the extent of ITRI’s doctrine of equivalent analysis.

The ALJ finds that this is insufficient to establish a finding of infringement under the doctrine of equivalents. ITRI’s expert offered only conclusory testimony that the Accused Products regarding how the doctrine of equivalents would apply to this claim element. (CX-350C at Q/A 450.) The ALJ finds that Dr. Silzars’s testimony fails to demonstrate infringement under the doctrine of equivalents particularly when it: (a) states, without explanation, a “function” inconsistent with the function explicitly recited in the claim; (b) o a “result” without citing any evidence to support that finding; and (c) fails to explain how “a sheet that is constructed in the shape of an arc” may be equivalent to a substantially flat sheet without vitiating the claim term “structured arc sheet.” (RX-325C at Q/A 107-108.) In particular, the ALJ notes that the claim explicitly recites the function of the “structured arc sheets” as for “making the illuminating light uniform.” (RX-0325C at Q/A 108.) Neither ITRI nor Dr. Silzars provides any justification for why the proposed function—“altering the pathway of the light source”—should be used in place of the one recited in the claims. Simply reciting this conclusion is insufficient. *See Network Commerce, Inc. v. Microsoft Corp.*, 422 F.3d 1353, 1363 (Fed. Cir. 2005). Indeed, it appears only to be a backdoor effort to obtain the claim construction the ALJ rejected.

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Dr. Silzars's testimony with regard to "result" also suffers similar defects because he slightly changes the result from "making the illuminating light uniform" to "more uniform" without explanation. Moreover, he cites to no evidentiary support for his conclusion that the light is made more uniform and ITRI's brief cites nothing either. Once again, such conclusory testimony is insufficient. *See id.*

In addition to reciting the wrong function and result, Dr. Silzars's testimony regarding the "way" the claimed invention works is similarly flawed. Dr. Silzars's testimony simply harks back to his infirm claim construction when he states that: "The LG products alter the pathway of the light the same way by employing at least two structured arc sheets, *which are semi-transparent sheets comprising arc-like structures.*" Thus, his reasoning is effectively that because the accused "structured arc sheets" in the Accused Products are consistent with *his* proposed claim construction they work in the same "way" as the claimed invention. This type of circular reasoning would effectively vitiate the claim construction the ALJ has adopted and this claim element as well. Thus, this also fails to satisfy the requirements of the doctrine of equivalents. *See Freedman Seating Co. v. Am. Seating Co.*, 420 F.3d 1350, 1359 (Fed. Cir. 2005).

Moreover, in addition to the infirmities identified above, the ALJ finds the differences between a substantially flat sheet with microscopic surface features or particles embedded in the sheet and a sheet constructed in the shape of an arc are not insubstantial in the context of the '932 Patent. *See Technology Patents LLC v. T-Mobile (UK) Ltd.*, --- F.3d ----, 2012 WL 4903197, at \*11 (Fed. Cir. October 17, 2012). The '932 Patent explicitly recognizes the types of sheets used in the Accused Products as prior art and disparages them as leading to "low efficiency of light utility rate," (JX-003 at 1:25-37), and teaches the use of sheets constructed in

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the shape of an arc to overcome these limitations. In contrast, the Accused Products use basically the same technology that was disparaged in the '932 Patent. Dr. Silzars's testimony provides no real guidance why the sheets in LG's Accused Products overcome these problems in the same way to reach the same result as in the '932 Patent. Indeed, the Accused Products do not even resemble the claimed invention in any way. In such cases, the doctrine of equivalents has no real application. *See Tech. Patents*, 2012 WL 4903197, at \*11.

Finally, the ALJ finds that Dr. Silzars's testimony regarding the doctrine of equivalents is not credible. Dr. Silzars previously testified during his deposition that he was unable to offer any opinion on infringement under the doctrine of equivalents. (RX-325C at Q/A 80; Tr. 23:22-24:25; 151:7-153:8.) It was only at the evidentiary hearing that he recanted his prior testimony and offered the current analysis regarding the doctrine of equivalents. This eleventh-hour effort to alter his analysis further demonstrates that his already deeply flawed testimony is entitled to no weight.

In sum, the ALJ finds that ITRI has presented no competent evidence that LG's Accused Products infringe claim 6 of the '932 Patent under the doctrine of equivalents. Dr. Silzars's testimony is conclusory, unsupported by any evidence, inconsistent with claim language, and severely undermined by his prior testimony that he was not going to perform a doctrine of equivalents analysis. Moreover, the ALJ finds that in addition to these evidentiary infirmities that independently preclude a finding of infringement under the doctrine of equivalents, the differences between the claimed invention and the Accused Products are not insubstantial. Indeed, in the context of the patent, it is clear that the Accused Products function in completely different way from the claimed inventions. Accordingly, for these reasons, ITRI has not proved that the Accused Products infringe under the doctrine of equivalents.

**c) The Accused Products Do Not Infringe Claim 6**

In sum, the ALJ finds that the evidentiary record lacks any evidence demonstrating that the Accused Products meet the “structured arc sheet” limitation of Claim 6 either literally or by equivalents under the claim construction adopted by the ALJ. Thus, the ALJ finds that ITRI has failed to meet its burden of proving infringement of independent claim 6 of the '932 Patent by a preponderance of the evidence.

**2. Dependent Claims 9-10**

Claims 9 and 10 depend on independent claim 6. Inasmuch as each claim limitation must be present in an accused device in order for infringement to be found (either literally or under the doctrine of equivalents), a device cannot infringe a dependent claim if it does not practice every limitation of the independent claim from which it depends. *See Warner-Jenkinson Co.*, 520 U.S. at 40; *Monsanto Co. v. Syngenta Seeds, Inc.*, 503 F.3d 1352, 1359 (Fed. Cir. 2007). Furthermore, the Federal Circuit explained that:

One may infringe an independent claim and not infringe a claim dependent on that claim. The reverse is not true. One who does not infringe an independent claim cannot infringe a claim dependent on (and thus containing all the limitations of) that claim.

*Wahpelton Canvas Co., Inc. v. Frontier, Inc.*, 870 F.2d 1546, 1552 (Fed. Cir. 1989).

Accordingly, ITRI has failed to prove infringement of claims 9-10 as well.

**VI. DOMESTIC INDUSTRY**

**A. Applicable Law**

As stated in the notice of investigation, a determination must be made as to whether an industry in the United States exists as required by subsection (a)(2) of section 337. Section 337 declares unlawful the importation, the sale for importation or the sale in the United States after importation of articles that infringe a valid and enforceable U.S. patent only if an industry in the

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United States, relating to articles protected by the patent . . . concerned, exists or is in the process of being established. There is no requirement that the domestic industry be based on the same claim or claims alleged to be infringed. 19 U.S.C. § 1337(a)(2).

The domestic industry requirement consists of both an economic prong (*i.e.*, there must be an industry in the United States) and a technical prong (*i.e.*, that industry must relate to articles protected by the patent at issue). *See Certain Ammonium Octamolybdate Isomers*, Inv. No. 337-TA-477, Comm'n Op. at 55, USITC Pub. 3668 (January 2004). The complainant bears the burden of proving the existence of a domestic industry. *Certain Methods of Making Carbonated Candy Products*, Inv. No. 337-TA-292, Comm'n Op. at 34-35, USITC Pub. 2390 (June 1991).

Thus, in this investigation ITRI must show that it satisfies both the technical and economic prongs of the domestic industry requirement with respect to the '932 Patent. As noted, and as explained below, it is found that the domestic industry requirements have not been satisfied.

A complainant in a patent-based Section 337 investigation must demonstrate that it is practicing or exploiting the patents at issue. *See* 19 U.S.C. § 1337(a)(2) and (3); *also see Certain Microsphere Adhesives, Process for Making Same, and Products Containing Same, Including Self-Stick Repositionable Notes*, Inv. No. 337-TA-366, Comm'n Op. at 8 (U.S.I.T.C., January 16, 1996) ("*Certain Microsphere Adhesives*"), *aff'd sub nom. Minn. Mining & Mfg. Co. v. U.S. Int'l Trade Comm'n*, 91 F.3d 171 (Fed. Cir. 1996) (Table); *Certain Encapsulated Circuits*, Comm'n Op. at 16. The complainant, however, is not required to show that it practices any of the claims asserted to be infringed, as long as it can establish that it practices at least one claim of the asserted patent. *Certain Point of Sale Terminals and Components Thereof*, Inv. No. 337-TA-524,

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Order No. 40 (April 11, 2005). Fulfillment of this so-called “technical prong” of the domestic industry requirement is not determined by a rigid formula, but rather by the articles of commerce and the realities of the marketplace. *Certain Diltiazem Hydrochloride and Diltiazem Preparations*, Inv. No. 337-TA-349, U.S.I.T.C. Pub. No. 2902, Initial Determination at 138, (U.S.I.T.C., February 1, 1995) (unreviewed in relevant part) (“*Certain Diltiazem*”); *Certain Double-Sided Floppy Disk Drives and Components Thereof*, Inv. No. 337-TA-215, 227 U.S.P.Q. 982, 989 (Comm’n Op. 1985) (“*Certain Floppy Disk Drives*”).

The test for claim coverage for the purposes of the technical prong of the domestic industry requirement is the same as that for infringement. *Certain Doxorubicin and Preparations Containing Same*, Inv. No. 337-TA-300, Initial Determination at 109 (U.S.I.T.C., May 21, 1990) (“*Certain Doxorubicin*”), *aff’d*, Views of the Commission at 22 (October 31, 1990). “First, the claims of the patent are construed. Second, the complainant’s article or process is examined to determine whether it falls within the scope of the claims.” (*Id.*) As with infringement, the first step of claim construction is a question of law, whereas the second step of comparing the article to the claims is a factual determination. *Markman*, 52 F.3d at 976. The technical prong of the domestic industry can be satisfied either literally or under the doctrine of equivalents. *Certain Excimer Laser Systems for Vision Correction Surgery and Components Thereof and Methods for Performing Such Surgery*, Inv. No. 337-TA-419, Order No. 43 (July 30, 1999). The patentee must establish by a preponderance of the evidence that the domestic product practices one or more claims of the patent. *See Bayer*, 212 F.3d at 1247.

In patent based proceedings under section 337, a complainant must establish that an industry “relating to the articles protected by the patent . . . exists or is in the process of being established” in the United States. 19 U.S.C. § 1337(a)(2). Under Commission precedent, the

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domestic industry requirement of Section 337 consists of a “technical prong” and an “economic prong.” The “technical prong” of the domestic industry requirement is satisfied when the complainant’s activities relate to an article “protected by the patent.” The “economic prong” of the domestic industry requirement is satisfied when the economic activities set forth in subsections (A), (B), and/or (C) of subsection 337(a)(3) have taken place or are taking place with respect to the protected articles. *Certain Data Storage Systems and Components Thereof*, Inv. No. 337-TA-471, Initial Determination Granting EMC’s Motion No. 471-8 Relating to the Domestic Industry Requirement’s Economic Prong (unreviewed) at 3 (Public Version, October 25, 2002); *see also Certain Printing and Imaging Devices and Components Thereof*, Inv. No. 337-TA-690, Commission Op. at 25 (February 17, 2011) (“*Printing and Imaging Devices*”). Summary determination may be granted with respect to the technical prong while reserving for trial proof of the technical prong. *See Certain Microcomputer Controllers, Components Thereof, and Products Containing Same*, Inv. 337-TA-331, Initial Determination Granting Summary Determination on Economic Prong (January 8, 1992). With respect to the “economic prong,” 19 U.S.C. § 1337(a)(2) and (3) provide, in full:

(2) Subparagraphs (B), (C), (D), and (E) of paragraph (1) apply only if an industry in the United States, relating to the articles protected by the patent, copyright, trademark, mask work, or design concerned, exists or is in the process of being established.

(3) For purposes of paragraph (2), an industry in the United States shall be considered to exist if there is in the United States, with respect to the articles protected by the patent, copyright, trademark, mask work, or design concerned—

(A) significant investment in plant and equipment;

(B) significant employment of labor or capital; or

(C) substantial investment in its exploitation, including engineering, research and development, or licensing.

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*Id.*

Given that these criteria are in the disjunctive, satisfaction of any one of them will be sufficient to meet the domestic industry requirement. *Certain Integrated Circuit Chipsets and Products Containing Same*, Inv. No. 337-TA-428, Order No 10 at 3, Initial Determination (Unreviewed) (May 4, 2000), citing *Certain Variable Speed Wind Turbines and Components Thereof*, Inv. No. 337-TA-376, Commission Op. at 15, USITC Pub. 3003 (Nov. 1996). The Commission has embraced a flexible, market-oriented approach to domestic industry, favoring case-by-case determination “in light of the realities of the marketplace” that encompass “not only the manufacturing operations” but may also include “distribution, research and development and sales.” *Certain Dynamic Random Access Memories*, Inv. No. 337-TA-242, USITC Pub. 2034, Commission Op. at 62 (Nov. 1987) (“*DRAMs*”).

Congress enacted 19 U.S.C. § 1337(a)(3) in 1988 as part of the Omnibus Trade and Competitiveness Act. *See Certain Plastic Encapsulated Integrated Circuits*, Inv. No. 337-TA-315, USITC Pub. No. 2574 (Nov. 1992), Initial Determination at 89 (October 16, 1991) (unreviewed in relevant part). The first two sub-paragraphs codified existing Commission practice. *See id.* at 89; *see also Certain Male Prophylactic Devices*, Inv. No. 337-TA-546, Commission Op. at 39 (June 29, 2007). Under Commission precedent, these requirements could be met by manufacturing the articles in the United States, *see, e.g., DRAMs*, Commission Op. at 61, or other related activities, *see Schaper Mfg. Co. v. U.S. Int’l Trade Comm’n*, 717 F.2d 1368, 1373 (Fed. Cir. 1983) (“[I]n proper cases, ‘industry’ may encompass more than the manufacturing of the patented item. . .”).

In addition to subsections (A) and (B), there is also subsection (C). “In amending section 337 in 1988 to include subsection (C), Congress intended to liberalize the domestic industry requirement so that it could be satisfied by all ‘holders of U.S. intellectual property rights who

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are engaged in activities genuinely designed to exploit their intellectual property’ in the United States.” *Certain Multimedia Display and Navigation Devices and Systems and Components Thereof, and Products Containing Same*, Inv. No. 337-TA-694, Commission Op. at 7 (August 8, 2011) (quoting *Certain Digital Processors and Digital Processing Systems, Components Thereof, and Products Containing Same*, Inv. No. 337-TA-559, Final Initial Determination at 93 (unreviewed in relevant part) (May 11, 2007)). Thus, “[u]nlike sub-parts (A) and (B), sub-part (C) of section 337(a)(3) ‘does not require actual production of the article in the United States if it can be demonstrated that substantial investment and activities of the type enumerated are taking place in the United States.’” *Certain Personal Data and Mobile Communications Devices and Related Softwares*, No. 337-TA-710, Order 102: ID on Economic Prong at 4 (April 6, 2011) (unreviewed in relevant part) (“*Personal Data and Mobile Communications Devices*”) (quoting H.R. Rep. No. 100-40, pt. 1, at 157 (1987)).

In *Printing and Imaging Devices*, the Commission held that “under the statute, whether the complainant’s investment and/or employment activities are ‘significant’ is not measured in the abstract or absolute sense, but rather is assessed with respect to the nature of the activities and how they are ‘significant’ to the articles protected by the intellectual property right.” *Printing and Imaging Devices*, Commission Op. at 26. The Commission further stated that:

the magnitude of the investment cannot be assessed without consideration of the nature and importance of the complainant’s activities to the patented products in the context of the marketplace or industry in question . . . . whether an investment is ‘substantial’ or ‘significant’ is context dependent. (*Id.* at 31.)

Indeed, the Commission has emphasized that “there is no minimum monetary expenditure that a complainant must demonstrate to qualify as a domestic industry under the ‘substantial investment’ requirement” of section 337(a)(3)(C). *Certain Stringed Musical*

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*Instruments and Components Thereof*, Inv. No. 337-TA-586, Commission Op. at 25 (May 16, 2008). Moreover, the Commission has stated that a complainant need not “define or quantify the industry itself in absolute mathematical terms.” *Id.* at 26.

The Commission has long held “that the domestic industry inquiry under Section 337 is not limited to the activities of the patent owner, but also involved the activities of any licensees.” *Wind Turbines*, Inv. No. 337-TA-376, REMAND, Commission Op. at 20, USITC Pub. 3072 (Nov. 1997) (internal citations omitted); *see also Certain Static Random Access Memories*, Inv. No. 337-TA-341, Order No. 5.; *Certain Dynamic Random Access Memories, Components Thereof and Products Containing the Same*, Inv. No. 337-TA-242 at 62 (Sept. 1987); and *Certain Microsphere Adhesives, Processes for Making Same, and Products Containing Same*, Inv. No. 337-TA-366 (Sept. 1995). “Indeed, it has been the long-standing Commission practice to examine the activities of licensees in making domestic industry determinations.” *Id.* at 20, n.14. The Commission has relied solely on the activities of the licensees in establishing the economic prong of the domestic industry requirement. *Id.* (citing *Certain Diltiazem Hydrochloride and Diltiazem Preparations*, Inv. No. 337-TA-349, Initial Determination (unreviewed portion) at 133-141)).

Here, ITRI relies on the activities of its licensee, Samsung Electronics Co., Ltd. and its subsidiary Samsung Electronics America, Inc. (“SEA”). (CIB at 1.)

**B. Technical Prong**

The evidence shows that ITRI has failed to meet the technical prong of the domestic industry requirement. None of the parties disputes the fact that their analysis of the Domestic Industry Products and their analysis of the Accused Products are essentially identical, at least with respect to the accused “structured arc sheets.” (CIB at 34, 38-39; RIB at 39-40; RRB at 15-

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16; SIB at 44-45; SRB at 27.) Each set of products contains similar types of light control sheets and the test for claim coverage for purposes of satisfying the “technical prong” of the domestic industry requirement is the same as that for infringement. (*Id.*)

The ALJ finds that just as “structured arc sheets” are absent from all of the Accused Products, “structured arc sheets” are also absent from all of the Domestic Industry Products. The evidence demonstrates that the Domestic Industry Products are structurally similar to the Accused Products and do not have any “sheet that is constructed in the shape of an arc.” (RX-325C at Q/A 197-198.) After examining the analysis of the Domestic Industry Products performed by ITRI’s expert, LG’s expert determined that the Domestic Industry Products, like the Accused Products, contain a combination of flat sheets (*e.g.*, diffuser sheets, microlens sheets, microprism sheets, and light guides), and that none of these flat sheets is “a sheet that is structured in the shape of an arc.” (RX-325C at Q/A 199-201.) Thus, there is no dispute that under the claim construction adopted by the ALJ the Domestic Industry Products do not literally practice any of the asserted claims of the ’932 Patent.

As for the doctrine of equivalents, ITRI simply states that the Domestic Industry Products “still contain ‘structured arc sheets’ under the doctrine of equivalents for the same reasons the LG products would infringe under this doctrine.” (CIB at 38.) Assuming without deciding that this is sufficient to preserve this argument that the Domestic Industry Products practice the claimed invention under equivalents, the ALJ rejects this argument for same reasons stated above with respect to infringement by the Accused Products.

Because ITRI has failed to show that the Domestic Industry Products practice any claim of the ’932 Patent either literally or under the doctrine of equivalents, ITRI has failed to meet the technical prong of the domestic industry requirement.

**C. Economic Prong**

ITRI argues that its licensee's domestic activities, including the employment of labor and capital and investment in plant and equipment are significant enough to satisfy the economic prong. (CIB at 60.) Specifically, ITRI relies on SEA's customer and technical support and service and repair activities for its LCD televisions. (CIB at 61-62.) SEA provides these services through its customer call center in Greenville, South Carolina and through independent services, namely Field Engineers ("FEs"), Authorized Service Centers ("ASCs") and Dealer Service Centers ("DSCs"). (CIB at 62.) ITRI argues that SEA satisfies the economic prong domestic industry requirement under subsections (A) and (B) through its significant employment of labor and capital and significant investment in plant and equipment to provide service and repair of the domestic industry products and that Samsung's products satisfy the technical prong of the domestic industry requirement.<sup>5</sup>

LG argues that ITRI has failed to satisfy the economic prong because it has overstated SEA's investments; fails to provide a reliable allocation method for SEA's investments; and failed to demonstrate that SEA's investments are comparatively "significant." (RIB at 70-74.) Specifically, LG argues that ITRI failed to provide a reliable allocation of SEA's investments attributable to the Domestic Industry Products and, further, the investments relied upon by ITRI were made by SEA before the execution of the license agreement, are a one time investments or investments made in foreign-manufactured repair parts. (RIB at 70-71.) LG further argues that the allocation method used by ITRI is unreliable because ITRI presents the number of sales based on sales of a particular model as a percentage of the total sales of Samsung LCD products, but the data provided by SEA is broken down by model number so no allocation needs to be

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<sup>5</sup> ITRI does not rely on subsection (C) and its licensing revenues from Samsung to satisfy the domestic industry requirement.

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applied to the data to determine what portion of the investment should be attributed to the Domestic Industry Products. (RIB at 72-73.) Finally, LG argues that ITRI failed to perform a comparative analysis of the relative importance or “significance” of domestic activities compared to the total activities. (RIB at 73-74.)

Staff argues that ITRI has satisfied the economic prong based on SEA’s significant employment of labor and capital and significant investment in plant and equipment to provide service and repair of the Domestic Industry Products. (SIB at 59.)

The ALJ finds that ITRI has satisfied the economic prong of the domestic industry requirement based on the activities of its licensee SEA. The evidence shows that SEA employs significant labor and capital in the United States by contracting FEs, ASCs, and DSCs to perform service, repair, and replacement of the Domestic Industry Products and maintains a call center in Greenville, SC (“Greenville Call Center”), which is an [REDACTED] with employees responsible for customer support and service for U.S. customers of the Domestic Industry Products. (JX-067C; CX-059C.)

Specifically, the evidence shows the following:

- [REDACTED]

- [REDACTED]

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<sup>6</sup> The ALJ has adopted Staff’s approach in calculating the amount spent by SEA, which takes into account the fact that the Samsung License Agreements was not executed until [REDACTED] and also uses the average annual payment to FEs, ASCs and DSCs. (SIB at 60-61, note 22.) LG does not dispute Staff’s method of calculation. (*See generally* RRB at 25-39.)

[REDACTED];

- [REDACTED];

- [REDACTED].

Therefore, based on the foregoing, the ALJ finds that ITRI has satisfied the economic prong of the domestic industry requirement based on the activities of its licensee, SEA.

The ALJ finds LG's arguments unpersuasive. First, LG's arguments relating to whether ITRI overstated SEA's investments fail in light of the methodology used by the ALJ, namely limiting the investments to the Domestic Industry Products and limiting the time period to after the execution of the license agreement with Samsung. The ALJ adopted Staff's proposed method and LG did not dispute that Staff's method was a more accurate allocation of SEA's expenses. (*See generally* RRB at 25-39.) Furthermore, SEA's investments in its FEs, ASCs, and DSCs for the Domestic Industry Products was calculated based on payments to FEs, ASCs, and DSCs that were broken down on a product model number basis. (JX-067C, ¶¶ 22, 25, 28, 29; CX-059C, Q/A 31-34; CX-040C.)

As for LG's arguments as to whether any investments made prior to the execution of the license agreement should be considered, the ALJ notes that the methodology used in allocating costs took that concern into consideration. Furthermore, the ALJ agrees with Staff that any investments made prior to the execution of the license agreement should not be disregarded in its entirety. As Staff correctly notes, the investments prior to the execution of the license agreement

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provide a basis for determining, *inter alia*, (i) the ongoing average cost of service, repair, and replacement; (ii) the frequency of repair; and (iii) the average cost of repair per unit, which are relevant to determining whether Complainants meet the “economic prong” of the domestic industry requirement. (CX-059C, Q/A 33-35, 74-78.) Similarly, SEA’s one-time investments in the Greenville Call Center are highly relevant to the domestic industry determination because [REDACTED] work out of the Greenville Call Center to provide customer service and support for the Domestic Industry Products and provide some context for SEA’s ongoing investments in the operation of the Greenville Call Center with respect to the Domestic Industry Products.

The ALJ further rejects any attempts by LG to place what appear to be an “intent” requirement on the economic prong of the domestic industry requirement, *i.e.*, whether SEA “expected” or intended the Greenville Call Center or the repair and service work to relate to the ’932 Patent. (*See* RRB at Note 30.) While the timing of the license agreement is certainly a factor that must be considered in the domestic industry analysis (and was considered in the ALJ’s analysis), the patentee is entitled to rely on its licensee’s activities related to the Domestic Industry Products once the license agreement has been executed regardless of whether the licensee actually “expected” its activities to be related to the patent. In other words, the license exists regardless of the reasons for entering into the agreement and, under Commission precedent, the licensee’s activities can be considered for satisfying the domestic industry requirement. Furthermore, the economic prong of the domestic industry requirement has no “intent” requirement—either in the language of the statute or in any Commission precedent. The focus is entirely on the actual investments or expenditures and not whether they were “intended” or “expected” to relate to a given patent.

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The ALJ also finds LG's arguments that ITRI has improperly allocated investments based on the sales of Domestic Industry Products as a percentage of the total sales of Samsung LCD products rather than on the cost of repairs for the Domestic Industry Products as a percentage of the total cost of repairs for Samsung LCD Products also fails. LG's proposed methodology fails to address the reality of SEA's activities and investments relating to the Greenville Call Center, which handle additional customer service and support activities that do not include only repair services. (CX-059C, Q&A 23.) Thus, the ALJ finds that ITRI's proposed allocation based on sales appears to better reflect the magnitude of repairs and capture the costs associated with the customer service and support activities performed at the Greenville Call Center for the Domestic Industry Products.

Finally, as for LG's argument that ITRI failed to conduct a comparative analysis, the ALJ also finds those unpersuasive. ITRI's expert explained how SEA's customer support, service, and repair activities relating to the Domestic Industry Products and SEA's investments therein are significant, both qualitatively and quantitatively. (CX-059C, Q&A 71-90.) Specifically, ITRI showed that SEA's warranty and activities related thereto (including the customer support service and repair services) play a significant role in Samsung's overall LCD television market. While it is not quite clear what LG asserts that ITRI has failed to show, it appears that LG takes issue with the fact that ITRI failed to compare SEA's investments against Samsung's or SEA's investments in such things as "worldwide data, or non-LCD data." (RRB at 34-35.) The ALJ declines to require such a broad comparative approach as it is well outside the "context of the marketplace or industry in question," namely the domestic LCD television market.

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In sum, the ALJ finds that the evidence show that SEA has made significant employment of labor and capital and significant investment in plant and equipment to provide service and repair of the Domestic Industry Products.

Having found that the '932 Patent is not infringed and that ITRI has failed to satisfy the domestic industry requirement, the ALJ finds that the disposition of these material issues satisfies Commission Rule 210.42(d) and, consequently, that no violation of Section 337 has occurred in this investigation. In light of the foregoing findings and in the interests of judicial economy and efficiency—particularly in light of the Commission's heavy Section 337 caseload—the ALJ declines to conduct a validity or unenforceability analysis.

**VII. CONCLUSIONS OF LAW**

1. The Commission has personal jurisdiction over the parties and subject-matter and *in rem* jurisdiction over the accused products.
2. The importation or sale requirement of section 337 is satisfied.
3. The Accused Products do not infringe the '932 Patent.
4. The technical prong of the domestic industry requirement has not been satisfied.
5. The economic prong of the domestic industry requirement has been satisfied.
6. It has not been established that a violation exists of section 337 for the asserted claims of the '932 Patent.

### VIII. INITIAL DETERMINATION AND ORDER

Based on the foregoing, it is the INITIAL DETERMINATION of this ALJ that a no violation of section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337, has occurred in the importation into the United States, the sale for importation, or the sale within the United States after importation of certain devices for improving uniformity used in a backlight module and components thereof and products containing the same that infringe one or of claims 6, 9 and 10 of U.S. Patent No. 6,883,932.

Further, this Initial Determination, together with the record of the hearing in this investigation consisting of:

- (1) the transcript of the hearing, with appropriate corrections as may hereafter be ordered, and
- (2) the exhibits received into evidence in this investigation, as listed in the attached exhibit lists in Appendix A,

are CERTIFIED to the Commission. In accordance with 19 C.F.R. § 210.39(c), all material found to be confidential by the undersigned under 19 C.F.R. § 210.5 is to be given *in camera* treatment.

The Secretary shall serve a public version of this ID upon all parties of record and the confidential version upon counsel who are signatories to the Protective Order (Order No. 1.) issued in this investigation, and upon the Commission investigative attorney.

## RECOMMENDED DETERMINATION ON REMEDY AND BOND

### I. Remedy and Bonding

The Commission's Rules provide that subsequent to an initial determination on the question of violation of section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337, the administrative law judge shall issue a recommended determination containing findings of fact and recommendations concerning: (1) the appropriate remedy in the event that the Commission finds a violation of section 337, and (2) the amount of bond to be posted by respondents during Presidential review of Commission action under section 337(j). *See* 19 C.F.R. § 210.42(a)(1)(ii).

#### A. Limited Exclusion Order

Under Section 337(d), the Commission may issue either a limited or a general exclusion order. A limited exclusion order directed to respondents' infringing products is among the remedies that the Commission may impose, as is a general exclusion order that would apply to all infringing products, regardless of their manufacturer. *See* 19 U.S.C. § 1337(d).

If a violation is found, ITRI argues that a limited exclusion order prohibiting LG from importing any accused product that infringes one or more of the asserted claims of the '932 Patent. (CIB at 74.) Staff agrees. (SIB at 65.)

If a violation is found, the ALJ recommends that the Commission issue a limited exclusion order prohibiting LG from importing any accused product that infringes one or more of the asserted claims of the '932 Patent.

#### B. Cease and Desist Order

Section 337 provides that in addition to, or in lieu of, the issuance of an exclusion order, the Commission may issue a cease and desist order as a remedy for violation of section 337. *See*

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19 U.S.C. § 1337(f)(1). The Commission generally issues a cease and desist order directed to a domestic respondent when there is a “commercially significant” amount of infringing, imported product in the United States that could be sold so as to undercut the remedy provided by an exclusion order. *See Certain Crystalline Cefadroxil Monohydrate*, Inv. No. 337-TA-293, USITC Pub. 2391, Comm’n Op. on Remedy, the Public Interest and Bonding at 37-42 (June 1991); *Certain Condensers, Parts Thereof and Products Containing Same, Including Air Conditioners for Automobiles*, Inv. No. 337-TA-334, Comm’n Op. at 26-28 (Aug. 27, 1997).

ITRI and LG have stipulated that a cease and desist order is appropriate if a violation is found. (May 23, 2012 Stipulation Between Complainants and Respondents.) Thus, should the Commission find a violation, the ALJ recommends a cease and desist order against LG Electronics USA and LG Display America.

### **C. Bond During Presidential Review Period**

The Administrative Law Judge and the Commission must determine the amount of bond to be required of a respondent, pursuant to section 337(j)(3), during the 60-day Presidential review period following the issuance of permanent relief, in the event that the Commission determines to issue a remedy. The purpose of the bond is to protect the complainant from any injury. 19 C.F.R. § 210.42(a)(1)(ii), § 210.50(a)(3).

When reliable price information is available, the Commission has often set the bond by eliminating the differential between the domestic product and the imported, infringing product. *See Certain Microsphere Adhesives, Processes for Making Same, and Products Containing Same, Including Self-Stick Repositionable Notes*, Inv. No. 337-TA-366, Comm’n Op. a 24 (1995). In other cases, the Commission has turned to alternative approaches, especially when the level of a reasonable royalty rate could be ascertained. *See, e.g., Certain Integrated Circuit*

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*Telecommunication Chips and Products Containing Same, Including Dialing Apparatus*, Inv. No. 337-TA-337, Comm'n Op. at 41 (1995). A 100 percent bond has been required when no effective alternative existed. *See, e.g., Certain Flash Memory Circuits and Products Containing Same*, Inv. No. 337-TA-382, USITC Pub. No. 3046, Comm'n Op. at 26-27 (July 1997) (a 100% bond imposed when price comparison was not practical because the parties sold products at different levels of commerce, and the proposed royalty rate appeared to be *de minimis* and without adequate support in the record).

The parties have stipulated that a bond rate of 1% of the entered value of each infringing product is appropriate. (May 23, 2012 Joint Stipulation Between Complainants and Respondents.)

The ALJ recommends a 1% bond rate.

## **II. Conclusion**

In accordance with the discussion of the issues contained herein, it is the RECOMMENDED DETERMINATION ("RD") of the ALJ should the Commission find a violation, then it should issue a limited exclusion order and cease and desist order directed at LG's products found to infringe the valid claims of the '932 Patent be issued. Furthermore, Respondents should be required to post a bond of 1% during the Presidential review period.

**PUBLIC VERSION**

Within seven days of the date of this document, each party shall submit to the office of the Administrative Law Judge a statement as to whether or not it seeks to have any portion of this document deleted from the public version. The parties' submissions must be made by hard copy by the aforementioned date.

Any party seeking to have any portion of this document deleted from the public version thereof must submit to this office (1) a copy of this document with red brackets indicating any portion asserted to contain confidential business information by the aforementioned date and (2) a list specifying where said redactions are located. The parties' submission concerning the public version of this document need not be filed with the Commission Secretary.

**SO ORDERED.**

  
Theodore R. Essex  
Administrative Law Judge

**CERTAIN DEVICES FOR IMPROVING UNIFORMITY USED  
IN A BACKLIGHT MODULE AND PRODUCTS CONTAINING  
THE SAME**

Inv. No. 337-TA-805

**PUBLIC CERTIFICATE OF SERVICE**

I, Lisa R. Barton, hereby certify that the attached **INITIAL DETERMINATION ON VIOLATION OF SECTION 337 AND RECOMMENDED DETERMINATION** has been served by hand upon the Commission Investigative Attorney, **Vu Q. Bui, Esq.**, and the following parties as indicated on **November 1, 2012**.



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U.S. International Trade Commission  
500 E Street, SW, Room 112A  
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**On Behalf of Respondents LG Corporation, LG  
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**CERTAIN DEVICES FROM IMPROVING UNIFORMITY  
USED IN A BACKLIGHT MODULE AND PRODUCTS  
CONTAINING THE SAME**

**Inv. No. 337-TA-805**

**CERTIFICATE OF SERVICE – PAGE TWO**

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